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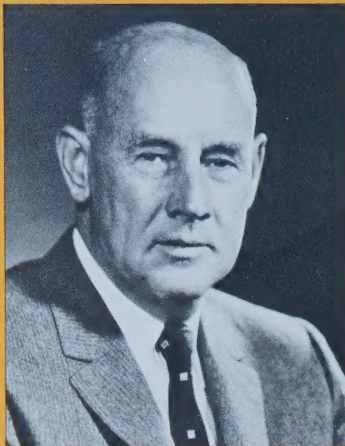
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Annual Meeting

Shareholders are cordially invited to attend the Annual Meeting at the IMC General Office, 421 East Hawley Street, Mundelein, Illinois, at 10:00 a.m. Central Daylight Time, on Wednesday, October 5, 1977. A formal notice of the meeting, together with a proxy statement and proxy card, accompanies this Annual Report to shareholders.

Form 10-K Annual Report

A copy of IMC's Form 10-K Annual Report, expected to be filed with the Securities and Exchange Commission late in September, 1977, will be available on request from the Secretary of the Corporation at IMC Plaza, Libertyville, Illinois 60048.



Louis Ware

Louis Ware, the retired Chairman of the Board whose sure hand guided IMC from relative obscurity to a major position in world enterprise, died on May 10, 1977, at the age of 82.

His tenure with the company began as President and a Director in 1939, a troubled year in which IMC's earnings totaled a meager \$126,000 and operations consisted of limited Florida phosphate mining and a scattering of fertilizer manufacturing plants.

In the following quarter of a century Mr. Ware led the company to world leadership in potash and phosphate production. IMC's Saskatchewan potash undertaking, hailed at the time as the toughest mining project in the Western Hemisphere, became the first successful venture into Canadian potash. Mr. Ware also brought industrial chemicals and minerals operations into the company, and those operations are the nucleus today of IMC's Chemical and Industry Groups.

Mr. Ware was elected Chairman of the Board in 1958. In 1959 he retired as President, and in 1964 as Chairman.

The facts of his career are plain, but they do not express the friendship that was so important to all who knew him. After retirement he continued his great interest in the company and in the people of the company. Louis Ware was a mining engineer, industrialist, gentleman. He will be missed.

1977 Highlights

(Dollars in millions except per share amounts)	Years ended June 30	1977	1976
Net sales		\$1,280.2	\$1,260.0
Net earnings		108.2	135.2
Shareholders' equity		649.3	579.5
Return on shareholders' equity*		16.7%	23.3%
Return on invested capital*		12.1%	15.5%
Earnings per share			
Primary		\$ 6.09	\$ 7.73
Fully diluted		5.93	7.38
Common dividends paid per share		2.45	2.10
Book value per share		35.64	31.94

*Return on shareholders' equity is based on net earnings divided by year-end shareholders' equity. Return on invested capital is based on net earnings plus after-tax interest divided by year-end shareholders' equity and long-term debt.

To Our Shareholders:

IMC earned \$108.2 million, or \$6.09 per primary share in fiscal 1977. These earnings represent a 16.7 percent return on shareholders' equity and a 12.1 percent return on invested capital — a respectable showing in a year in which the economic environments in our major markets ranged from surprisingly strong to unexpectedly depressed.

Looking back: 1977 trailed 1975 and 1976, two years of extraordinary profit-

and other variable costs on the rise, IMC plans to continue its policy of tight inventory control and stringent controls on extension of credit. Quite clearly, prudent money management is the key to good results in the fertilizer business.

The outlook for ammonia is cloudy. Excess capacity exists, and the industry still has some new plant under construction. Accordingly, over the next 12 to 18 months the industry will be cutting, fitting, and sizing to the realities of the marketplace. The availability of natural

Richard A. Lenon,
President and
Chief Executive Officer



ability for the fertilizer industry. The \$6.09 per share was off 38 percent from 1975 and 21 percent from 1976.

Down is down, but 1977's 16.7 percent return on shareholders' equity is a good statement of the company's basic earnings power, and it is a fine base upon which to build.

The fertilizer industry is still wrestling with excess capacity, but the growing into new plant is less painful than might have been expected. U.S. demand — a pleasant surprise — totaled 51 million tons, up 3 percent from 1976, which in turn was up 16 percent from 1975.

The industry's potash shipments increased an impressive 22 percent. While some potash remained in the U.S. distribution system at year end, product going on the ground increased by approximately 6 percent. In phosphates, total shipments increased 10 percent, with a notable 12 percent increase in exports.

As we start the new year, industry inventories of phosphate and potash are near normal levels and sales possibilities appear favorable. With energy, labor,

gas is becoming increasingly unpredictable. Shortages could markedly reduce output.

For IMC's part, we control sufficient natural gas for our requirements, our ammonia production costs are highly competitive, and we are reasonably certain of sales volumes close to capacity. Prices are apt to be unsatisfactory, at least through fiscal 1978.

As predicted, our chemical and industrial businesses made important contributions to fiscal 1977 operating earnings—39 percent of the total. Selling into markets highly influenced by general economic conditions, these businesses picked up healthy momentum in the United States as the year progressed.

In Europe, important markets for IMC industrial products were depressed, and a change for the better is not in sight. Japanese business moved sideways last year and is likely to do the same this year.

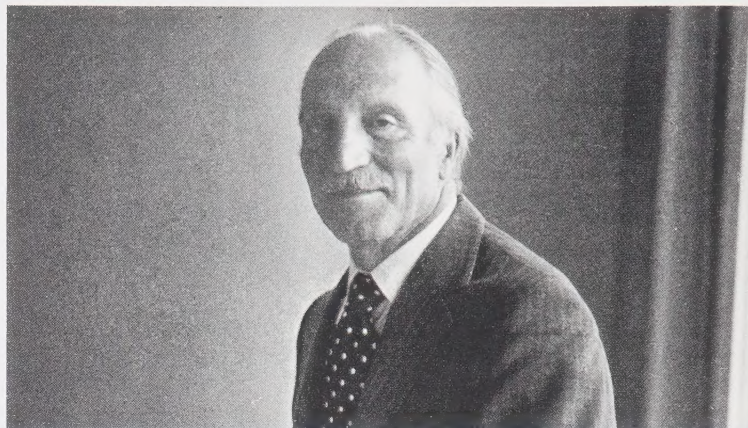
Capital spending totaled \$175 million in fiscal 1977, the fourth year of commitment to a major growth program. As of June 30, 1977, something

over 50 percent of the approximately \$750 million invested over the past four years was not yet earning the company's objective of a 12 percent return on invested capital. Most of these new assets will earn up to plan in due course.

The pruning of marginal assets continues, and those without potential will be sold or liquidated.

IMC has been forecasting earnings at its Annual Meeting each October, and the practice will be followed again this year. In our early planning, it is clear that we have a good chance to enjoy increases in sales almost across the board. Less predictably, but almost inexorably, we will experience very large increases in costs — everywhere for everything. Increases in prices seem likely, in the short run, to cover approximately one-quarter of the anticipated increases in costs. It follows, therefore, that a good part of the benefit from gains in volume cannot be converted into gains in earnings per share in fiscal 1978.

On the matter of increases in costs, it should be noted that IMC's environmental protection programs will total approximately \$36 million in fiscal 1978. While environmental protection is the most costly of the regulatory pro-



Anthony E. Cascino,
Executive Vice President,
Agriculture

public unnecessarily. Also, we are seeing the elimination of expansions that might have created new activities and new jobs.

The company has been seeking a coal producer as a logical extension of our commitment to natural resource businesses. Accordingly, we are pleased to have acquired a metallurgical coal property in eastern Kentucky. This property should give us a good start in the business.

We continue to think that, sooner or later, the potash industry and the Saskatchewan government will be able to meet on common ground. The government has moved to correct some past injustices, and these conciliatory gestures, plus some recent meetings with officials, give us hope that 1978 will be a year of progress in this difficult relationship.

Following past practice, this Annual Report features one of a variety of responses to corporate social responsibilities. During fiscal 1977, a major effort to improve the company's safety performance was launched. We are pleased to note that lost-time accidents were reduced by 43 percent. The program is described on page 10.

Fiscal 1977 was not an easy year; 1978 starts nicely, but again, it will not be easy. As always, the results will depend upon the talents of all people—in all jobs. On behalf of the Directors and the Executive Office, it is my privilege to thank the people of IMC for what they have achieved and for their continuing commitment to company goals.

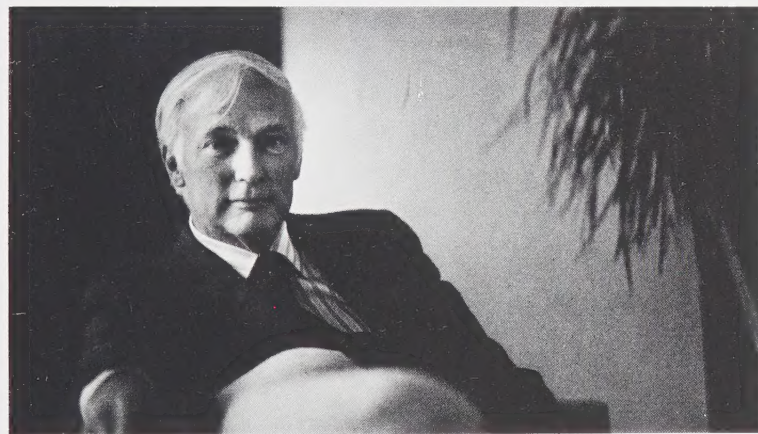
Sincerely,

A handwritten signature in cursive script, appearing to read "R. A. Liron".

August 17, 1977

grams from our point of view, the array of federal regulations — EPA, ERISA, OSHA, EEO, SEC, et al—is becoming increasingly formidable. Their costs have to flow through to price sooner or later.

This is not the proper place to discuss the complex issues involved in governmental regulation of business activity, but it does seem necessary to voice an appeal for thoughtful consideration of cost vis-à-vis the public benefit derived. Clearly, in some areas the rules seem to be increasing the costs of products to the producers and to the consuming



George D. Kennedy,
Executive Vice President,
Industry and Business
Development

Principal Products and Markets

Sales

Operating Earnings

	(in millions)		(in millions)	
	1977	1976	1977	1976
Agriculture	Phosphate Rock			
	\$138.4	\$201.6	\$ 59.8	\$128.5
	Concentrated Phosphates			
	195.1	190.2	24.4	30.5
	Potash			
Chemicals	Mixed Fertilizers			
	103.8	104.0	40.3	45.8
	Other			
	108.9	99.5	9.7	6.4
	56.5	58.3	1.6	(1.0)
Industry	<u>\$602.7</u>	<u>\$653.6</u>	<u>\$135.8</u>	<u>\$210.2</u>
	\$144.5	\$108.9	\$ 36.6	\$ 2.6
	Hydrocarbons			
	Industrial & Organic Chemicals			
	140.2	126.6	13.6	20.8
	Biochemicals			
	21.6	19.7	3.7	2.4
	<u>\$306.3</u>	<u>\$255.2</u>	<u>\$ 53.9</u>	<u>\$ 25.8</u>
	\$182.0	\$167.8	\$ 11.1	\$ 19.3
	135.9	128.6	14.3	10.5
	Carbon Products			
	53.3	54.8	8.6	7.3
	<u>\$371.2</u>	<u>\$351.2</u>	<u>\$ 34.0</u>	<u>\$ 37.1</u>
	Ferroalloys & Metals			
	Foundry Products and Other			

The Agriculture Group is the world's largest private producer of phosphate and potash fertilizer materials, and a leading producer of mixed fertilizers and animal feed ingredients.

The Chemical Group is a large producer and marketer of basic and specialty chemicals, with the product lines in hydrocarbons, industrial and organic chemicals, and biochemicals.

The Industry Group is an international supplier of materials for the steel and foundry industries. Principal products are petroleum coke, ferroalloys and metals, and foundry resins, clays, and sands.

Phosphate Rock	Sold to manufacturers of concentrated phosphates; also captive use. Shipments (millions of tons) 1977 1976 Export 3.2 3.6 Domestic 5.2 5.8 Captive 3.2 2.2 11.6 11.6	Fiscal 1977 average prices down about \$6 per ton. Prices began to firm in last half of year. Export shipments lower, but orders strong in last half.
Concentrated Phosphates	Sold to manufacturers of fertilizers and animal feeds; also captive use.	Fertilizer prices improved late in year. Feed ingredients average prices declined 8%, while costs were up.
Potash	Sold to manufacturers of fertilizers, caustic potash, and animal feeds; also captive use. Shipments (millions of tons) 1977 1976 Overseas .6 .7 U.S. and Canada 2.1 1.7 Captive .5 .4 3.2 2.8	Fiscal 1977 average prices down 11% per ton. Very sharp price declines in standard grade. All costs up.
Mixed Fertilizers	Sold to U.S. farmers and fertilizer retailers.	Outstanding year, with premium fertilizer tonnage up 24%.
Other	Sulfur sold on agency basis to fertilizer manufacturers; feed supplements sold to animal feedlots; land development business.	Sulfur and feed supplements performed well despite adversities. Modest loss in land development business.
Hydrocarbons	Natural gas: used captively and sold in spot transactions. Ammonia: sold to U.S. industrial and agricultural customers, and used by IMC in production of nitroparaffins (NPs), explosives, fertilizers. NPs: sold to manufacturers of pharmaceuticals, herbicides, coatings, inks, rubber, cosmetics, paints, wax. Carbon black: sold to rubber goods and specialty plastics producers.	Natural gas contributed 27% of total hydrocarbon fiscal 1977 operating profit. Good ammonia production performance, with remarkably smooth new plant startup; output totally sold, but prices unsatisfactory. NPs and carbon black recorded improved price/cost relationships. Explosives barely broke even because of market and cost problems.
Industrial & Organic Chemicals	Chlor-alkalis: sold to manufacturers of paper and pulp; wide spectrum of other uses. Feldspathic materials: sold to glass and ceramics manufacturers; fuller's earth: sold as oil absorbent. Ethyl alcohol, methanol, derivatives: sold to producers of cosmetics, solvents, coatings, surface active agents, and chemicals.	Chlorine and caustic soda sales were less than expected in fiscal 1977. Costs were higher, particularly energy. International business very disappointing. Feldspathic business steady, with strength as housing industry turned up. Industrial chemicals activity (ethyl alcohol, methanol) followed a fairly dull economy. Organic chemicals plant sold; business liquidated at a loss.
Biochemicals	Veterinary products: sold to livestock producers. Pharmaceutical chemicals: sold to pharmaceutical manufacturers.	Improved 1977 results reflect increased sales of growth-promoting animal implant, and earlier divestment of foreign loss operations.
Carbon Products	Petroleum coke, coke products: about 50% sold to steel producers abroad; balance to utilities, aluminum, cement producers.	Earnings decline in fiscal 1977 mostly due to continued depression in European steel industry and a flat Japanese steel industry.
Ferroalloys & Metals	Ferrosilicon, ferrochrome, ferromanganese, specialty ferroalloys, fluxing agents, ores, metals: sold to steel producers.	Increased ferrosilicon production from new furnace. International ferroalloys marketing efforts overcame adverse market conditions. Growth of olivine blast furnace additive had noticeable impact on total Industry results.
Foundry Products and Other	Foundry resins, clays, sands, machinery: sold to automotive, other foundries; growing resins business serves paint industry.	Strong U.S. automotive production and housing starts. Good sales/cost performance. Container business sold during fiscal 1977.

The Year in Brief

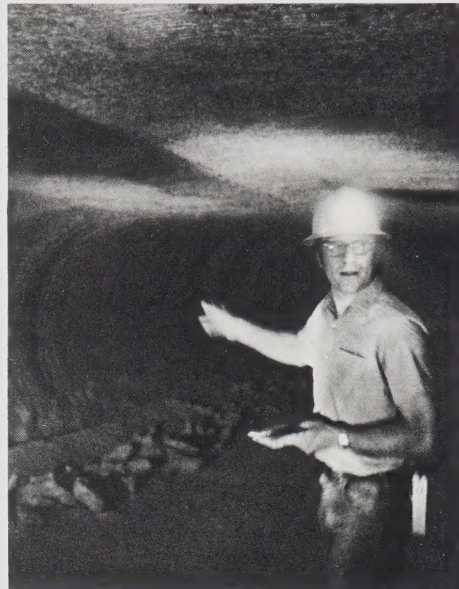
Expansion Projects

- New 1,150-ton-a-day ammonia plant came on stream ahead of schedule at Sterlington, Louisiana, at a cost of \$72 million; production reached design capacity 15 days after startup.
- Joint-venture 75,000-ton-a-year ferrosilicon furnace was completed at Bridgeport, Alabama, a month ahead of schedule at a below-budget figure of \$31 million; IMC owns 75 percent and Allegheny Ludlum 25 percent.
- Startup approached at New Wales, Florida, for new \$36 million animal feed ingredients plant to produce calcium and ammonium phosphates.
- Hydrochloric acid capacity at Orrington, Maine, was expanded in fiscal 1977 and will be expanded again in 1978.

Natural Resources

- An IMC improvement in mining and processing technology significantly increased phosphate rock reserves in southern Florida (see page 19 for details on reserve position).
- IMC increased its existing supplies of natural gas by 21 percent, the result of two discoveries, two acquisitions, and adjustments in reserve estimates (see page 15).
- IMC-Canada defined a consistent potash deposit in the Canadian province of New Brunswick; exploratory drilling continues. Further analysis and process

compared with \$22 per ton in fiscal 1976; 4.7 million tons of the domestic sales of rock were sold on contracts of more than a year's duration, with



Denny Mraz, Manager of Production Coordination, Saskatchewan Potash Operations: "It's been a group effort, above-ground and underground. We've increased the mining extraction rate from 27 percent to 46 percent, the best in the industry. We did it through developing our own calculations on what rates of extraction would be safe, and by redesigning equipment to make it more efficient. Suppliers told us they couldn't make the kind of bridge conveyor we wanted for less than \$150,000. We did it ourselves for \$12,000."

escalations for some cost increases.

- IMC's Florida phosphate chemicals plant completed its first full year of operations at above-design production rates, turning out 698,000 tons of P_2O_5 equivalent.
- IMC produced 2.4 million product tons of muriate of potash, 2.2 million tons in Saskatchewan and 230,000 tons in New Mexico; specialty potash from New Mexico accounted for another 640,000 tons.
- For all potash products, the average selling price was \$41 per ton in fiscal 1977 and \$46 per ton in fiscal 1976.
- Sales of Rainbow and Super Rainbow premium mixed fertilizers were up 20 percent from fiscal 1976, more than 63 percent of mixed goods total.
- Sales of animal feed ingredients strengthened late in the year as cost-price squeeze eased for nation's livestock producers; IMC produced 362,000 tons of feed ingredients, compared with 333,000 in the previous year.
- Ralgro, an anabolic growth-promoting agent for beef cattle and lambs, increased shipments to a record high, up 61 percent for fiscal 1977.
- Output of basic nitroparaffins totaled 74 million pounds, up 53 percent from a year ago, reflecting expansion and a resolution of production problems. NP sales totaled \$41 million, with major use in the protective coatings, pharmaceutical, and textile industries.
- Strong auto industry brought record

Bobby Avant, Plant Manager, Americus, Georgia, Mixed Fertilizer Operations: "We're the first plant to produce more than 100,000 tons of Super Rainbow. As I see it, it's just the product itself that's responsible for the record. We make what is needed to produce a good crop right here in this area. We don't make something designed to do everything for everybody—just what it takes to care for all of our local farmers' needs."



testing must be done before economic feasibility can be established.

Operations

- Phosphate rock prices, domestic and export, averaged about \$16 per ton,

sales, earnings for foundry products.

□ Thermal carbon black sales and earnings were up sharply, with mechanical rubber goods the major market.

□ IMC's Oliflux, in its first full year on the marketplace as a fluxing and cleansing agent, was accepted for use by eight major steel producers.

□ Carbon product sales increased by \$14 million from fiscal 1976. Inventories were high at the year end, but planned reduction targets were met.

□ McWhorter line of resins, serving the paint and coating industries, reported record sales and earnings.

New Products

□ A metallurgical coal business was purchased in eastern Kentucky after the year closed; present capacity is more than half a million tons a year, with recoverable reserves estimated at 40 million tons.

□ Construction started on a second animal feed ingredients plant at New Wales, Florida, this one an \$18 million project to produce defluorinated phosphate.

□ Construction began at Orrington, Maine, on IMC's first sodium chlorate

plant; capacity will be 40,000 tons a year, with product going to the pulp and paper industry.

Divestments

□ Sale of our old Florida animal feed ingredients plant for \$7.5 million will be effective September 1; plant will be replaced by the new construction coming on stream this fall.

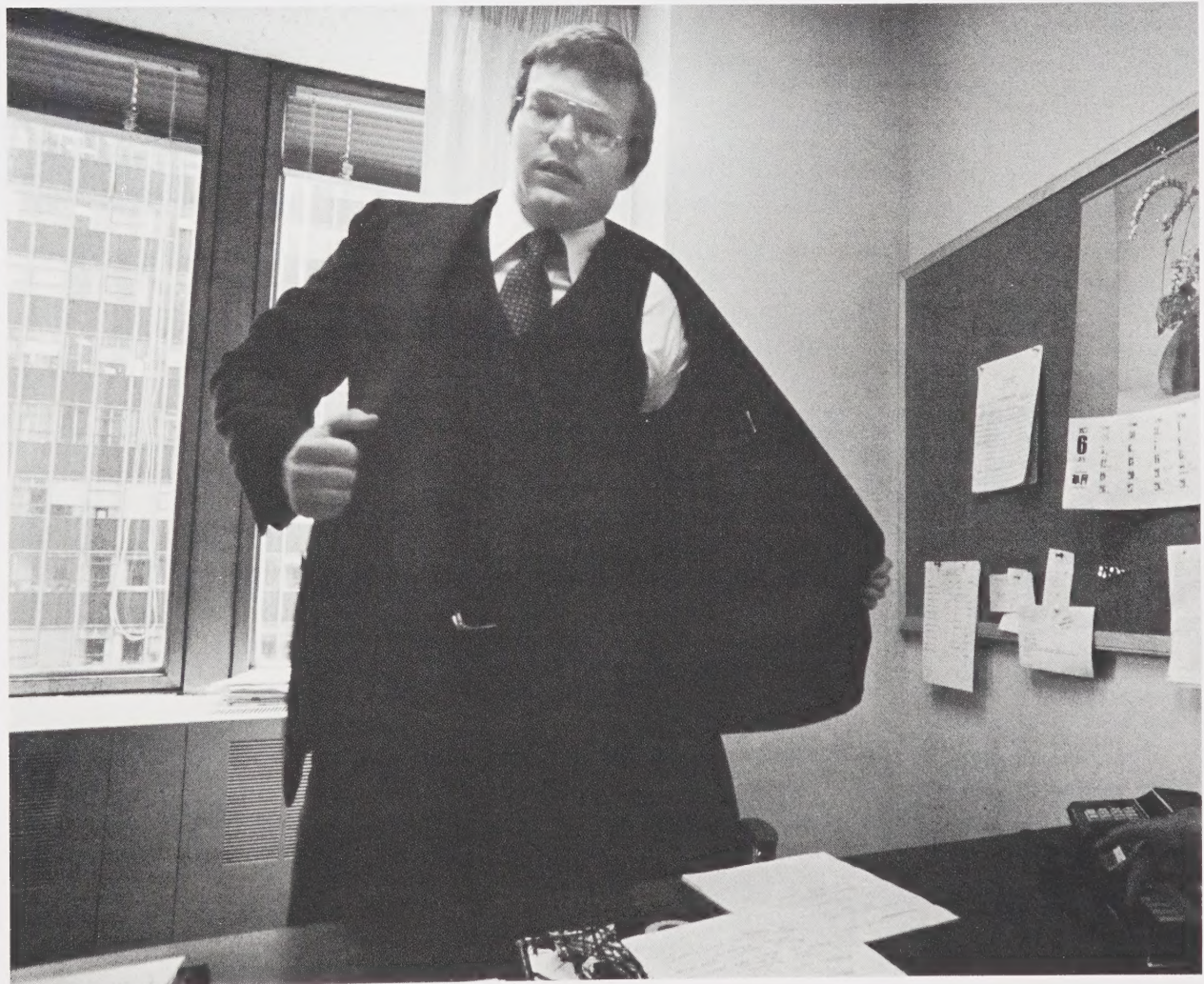
□ Great Lakes Container Corporation, Detroit-based industrial drum reconditioning business, was sold during the year, as was an organic chemicals plant at Montrose, New Jersey.

Legal Matters

□ IMC and other potash producers were acquitted of criminal charges brought against them by the Antitrust Division of the U.S. Department of Justice. The government voluntarily dismissed its companion civil suit based on similar allegations. Private treble damage actions involving essentially the same matters are pending in the U.S. District Court for the Northern District of Illinois (see page 34).

□ Federal antitrust grand jury investigations of the fertilizer industry continue

Steve Somogyi, Oliflux Product Manager, Ferroalloys and Metals: "Oliflux is an additive we've developed for alkali and slag control in blast furnaces. Three years ago it was still in the developmental stage. Now tonnage sold is growing at about 100 percent a year. It's much more efficient than other products in conserving energy. Some furnace tests have seen up to 10 percent increases in productivity. But Oliflux is new to the industry. It takes an unusually intense selling effort, with a team approach."



with respect to phosphate and nitrogen.

Corporate Matters

□ In its program to acquire "some or all" of the province's potash mines, the

par value Series preferred stock into common stock left the 4 percent cumulative preferred stock as the only preference shares outstanding.

Bill Doyle, Fertilizer Materials Sales Representative, Caribbean and Central America: "The emphasis on food production in nearly every Latin American country is evidence the governments realize agriculture is their number one resource. Every year is a new record in fertilizer tonnage in Latin America. IMC is the well-known, reliable supplier to the fertilizer market. These people know IMC can supply their needs—that IMC is going to be there today and tomorrow and in the future."



Saskatchewan government had bought the assets of two mines of other companies through the end of fiscal 1977 and was reported to have reached agreement for the purchase of a third (see page 33).

□ Common stock dividends totaled \$2.45 in fiscal 1977, 60 cents in each of the first three quarters and 65 cents in the fourth.

□ At year's end, 1,718 of IMC's U.S. holders of common stock were participating in an automatic dividend reinvestment service, in which Citibank of New York acts as agent for shareholders; there are no fees for purchases.

□ In fiscal 1977, IMC had 41 collective bargaining agreements with six international unions or their affiliated locals; 16 agreements covering 42 percent of the hourly work force were negotiated during the year, with 19 agreements covering 34 percent to be negotiated in 1978.

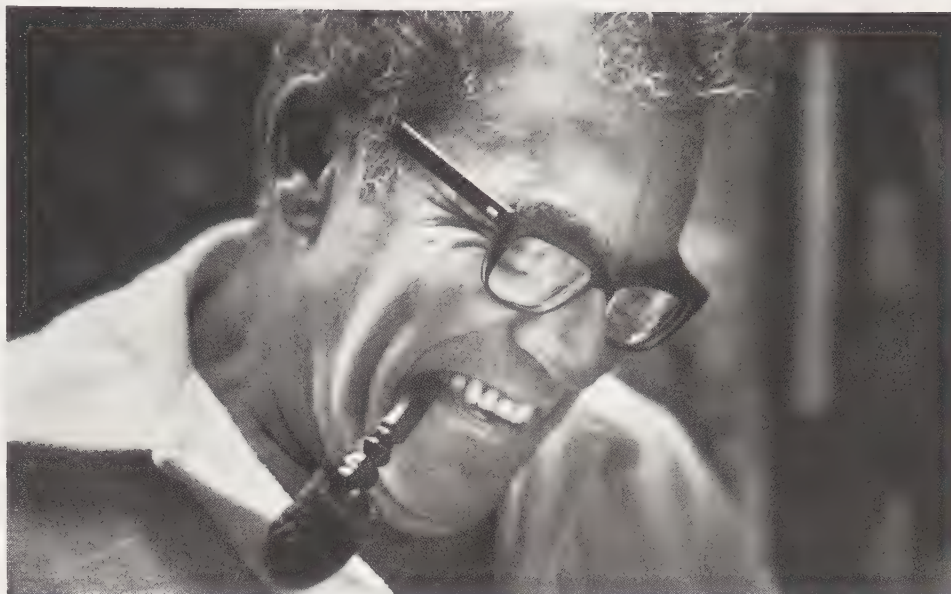
□ Conversion of the last of IMC's \$100

□ During the year, IMC complied with the provisions of the Employee Retirement Income Security Act of 1974 (ERISA) by amending 16 of its pension plans and taking other required administrative action. This compliance, together with the previous year's actions, has increased the company's annual pension expense by almost \$2 million, a rise of 36 percent.

□ In fiscal 1976, IMC adopted an Employee Stock Ownership Plan (ESOP) under the Tax Reduction Act of 1975. Under this Plan, 43,355 shares have been contributed to the Plan Trustee for the benefit of 3,800 U.S. salaried employees and former salaried employees. Officers and other members of senior management do not participate.

Changes in Directors and Officers

□ John H. Coleman was elected to the Board of Directors on December 1, 1976. Mr. Coleman is president of J.H.C. Associates Limited, a Toronto



Jim Lawver, Technical Manager, Florida Minerals Operations: "We've upped recovery rates in our phosphate plants by more than five units. That's added product for IMC to market instead of losing in the production system. Even more interesting may be the development of a new flow sheet for southern Florida rock—we think it will probably double previous projections of IMC reserves in that region."

consulting firm, and serves on the boards of a number of major U.S. and Canadian corporations. Prior to IMC's merger with Commercial Solvents Corporation in 1975, he was a CSC director. Mr. Coleman fills the seat on the IMC Board vacated by the resignation of William S. Leonhardt.

□ George B. Howell, who had been an IMC Senior Vice President and President of the IMC Industry Group, was elected an Executive Vice President and named to the newly created position of Executive Vice President, Corporate Administration.

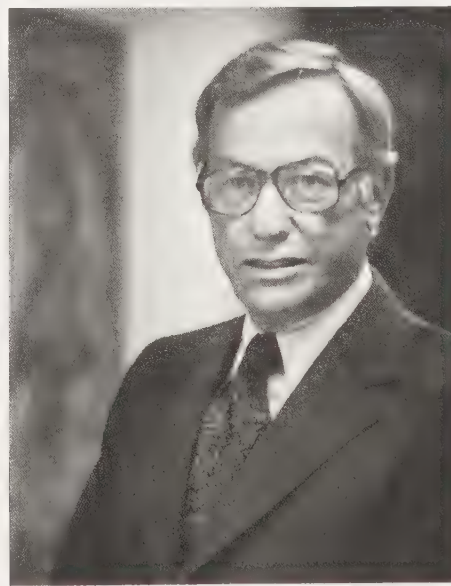
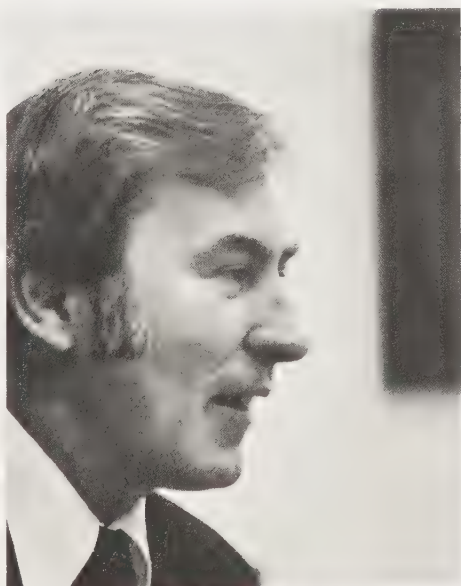
□ Donald E. Phillips, who had been Vice President in charge of the Rainbow Division, served with IMC Chemical Group, Inc., as Vice President and General Manager of Chemicals International, and more recently succeeded George B. Howell as President of the IMC Industry Group.

□ John R. Taylor, who had been Vice President, Secretary, and General Counsel of the Corporation, was elected a Senior Vice President and named to the newly created position of Senior Vice President, Law. He also continues as Secretary.

□ Nicolaus Bruns, Jr., who had served as Assistant General Counsel and Assistant Secretary, was appointed General Counsel, Operations, for the Corporation. He continues as Assistant Secretary.

□ James T. Gibson, Jr., who had been Vice President, Administration, was named to the newly created post of Vice President, Financial Operations and Real Estate.

□ John M. Stapleton, who had been Division Vice President, Organization and Personnel, was elected a Vice President and continues as head of Organization and Personnel.



James T. Gibson, Jr., Vice President; Chairman, Equal Employment Opportunity Committee: "As IMC has grown, our pension and employee benefit plan assets have climbed to over \$60 million. In the past year we consolidated these funds and did a major job of realigning fund management. All of this improves the control and administration of these assets—and in the long run gives our employees and their families greater benefit protection."

Anton F. Kuzdas, Vice President; Chairman, Equal Employment Opportunity Committee: "IMC is committed to a policy of equal employment—first, because it is right and fair, and second, because it is the law. This commitment has been communicated to all management and supervisory personnel. We have made some good progress, especially in our hiring, promotion, and training practices."

The Dimensions of Safety

The men and women of IMC reduced the company's lost-time accident rate in the United States and Canada by 43 percent in fiscal 1977.

The improvement was across the board, encompassing some 130 locations . . . mines, mills, plants, offices, warehouses, terminals, gas fields, and exploration sites.

The year ended with 61 percent of the 130 locations accident-free, compared with 50 percent in fiscal 1976.

Some of the records are remarkable:

- More than 2½ million continuously safe man-hours achieved by the 428 employees of our Terre Haute, Indiana, chemicals plant—no lost-time accidents since November 12, 1974.

- More than one million safe man-hours reached by the 72 employees of our Augusta, Georgia, mixed goods fertil-

these special corporate procedures have been instituted:

- Every lost-time accident is reported by wire to the company President within 24 hours.

- Reports of safety results carry equal weight at monthly management review meetings with reports of volumes, costs, and operating earnings.

- A corporate statistical report of lost-time accidents is circulated to all appropriate personnel each month.

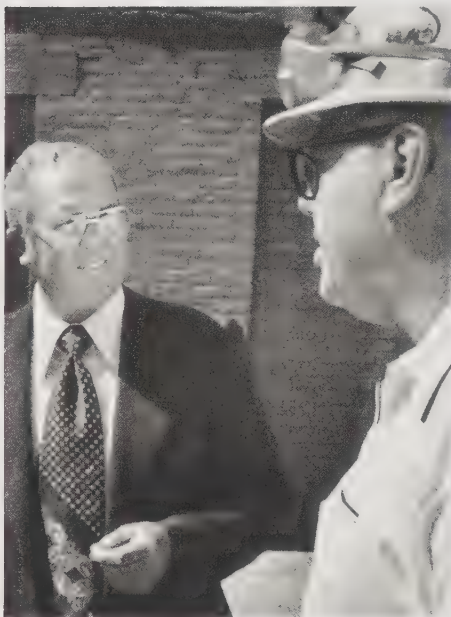
- Independent safety experts inspect essentially all operations on an annual basis.

- In addition to the regular safety training programs, special programs are being extended to cover new employees.

These attitudinal procedures were augmented in fiscal 1977 with a week-long corporate workshop attended by management personnel responsible for safety training at field locations.

A reasonable near-term goal is to cut our improved lost-time accident rate in half — always with an eye on the ultimate goal of zero.

Lee Webb, Manager, Terre Haute Plant: "On top of attitude and training, I think our safety record has been set because we're fortunate in having good morale—every employee tries to make sure he's not the one who's going to break the safety chain. We put safety ahead of production, but we also maintain production with safe habits."



izer plant—no lost-time accidents since November 9, 1970.

- More than one million safe man-hours worked by the 57 employees of our Colony, Wyoming, bentonite mill — no lost-time accidents since January 15, 1969.

Basic to all safety practices are compliance with government regulations, observance of company safety rules, and use of protective clothing and devices. But experience has demonstrated that all the regulations, rules, and protection in the world will not prevent accidents unless there is a safety attitude on the part of every employee. To maintain and reinforce this safety attitude,



Vern Haan, Director of Corporate Traffic: "In reorganizing the Eastern railroads, the government wanted to abandon 7,600 miles of branch lines, many of them in IMC fertilizer marketing areas. Through aggressive and persistent efforts—and repeated appearances before various agency hearings—we were able to stop the pendulum from swinging too far. The final cutback was about 3,200 miles. IMC's role in this effort earned much support from small businesses which owed their future to continued rail service—not just fertilizer companies, but many other firms."

The Outlook: 1978 and Beyond

Without diminishing efforts to build our basic fertilizer business, we expect to add significant earnings in our newer chemicals and industry businesses. Chemicals and industry earnings increased to 39 percent of corporate operating earnings in fiscal 1977, compared with 23 percent in fiscal 1976. While the 1977 percentage differential reflects, to some degree, a drop in agricultural earnings, it should be noted that chemicals and industry contributed \$87.9 million of 1977 operating earnings compared with \$62.9 million in 1976. Further advances seem reasonable.

We have examined the prospects for each of our businesses, short- and long-term, and our thoughts follow.

Fertilizers

The fertilizer industry is an aggregation of companies with widely differing

process these materials for what is a totally retail business.

IMC is primarily a wholesaler, but with a heavy emphasis on exports. This wholesale base plus our export emphasis is unique in the industry, and this will be very important for the next several years.

In the United States, it appears that farmers will harvest record crops this calendar year, and granaries already full are apt to be bulging with grain by fall. Fertilizer usage in the United States is not likely to be up in 1978—probably flat at the 1976 and 1977 highs. Weather, government farm programs, and other external forces will have an important bearing on this prospect.

Outside the United States, in fertilizer markets critically important to IMC, highly favorable trends are apparent. At this time, we are expecting IMC sales to overseas customers to take about

Sidney T. Keel, Senior Vice President, Agricultural Marketing; Chairman, World Food Production Conferences: "IMC's World Food Production Conferences are a natural reflection of IMC's corporate growth. These conferences began in Hong Kong back in 1965, and since then we've convened them twice a year around the world, particularly in developing nations. Leading figures in government and science are participants, but the major participation comes from members of the world fertilizer industry. The purpose: see what we and the industry can do to help boost food output."



product lines and approaches to the market. Some companies are totally wholesalers of raw materials; others specialize in raw materials but do some retail business; and still others buy and

50 percent of our concentrated phosphate sales, 40 percent of our rock sales, and 24 percent of our potash sales. Most notably, we are expecting a 30 percent increase in shipments of phosphate rock.

With IMC's approach to the fertilizer business, the keys to successful operations are large, efficient mines and plants, adequate mineral reserves, and

the next two or three years. Nitrogen is not a significant export item, although significant quantities move offshore as components of concentrated phosphates.

Dick Hedberg, Regional Sales Manager, Domestic Agricultural Sales:

"We were able to move record tonnages of potash into the western part of the corn belt for two reasons. The addition of young new blood on the sales staff gave us the ability to reduce the size of territories and go after more concentrated sales coverage. And we used market surveys to see how we could really be of service to the independent fertilizer producer. He's an important part of the market, and he responds to the services we're prepared to offer."



effective marketing. In the halcyon fertilizer years of 1974-76, we brought our plants, the largest in the industry, to mint condition. Our reserve position is discussed on page 19.

During the 1974-76 period IMC built the world's largest concentrated phosphate plant, completed at just about the time the market was saturated. Accordingly, production had to be phased in slowly, and only late in fiscal 1977 did we bring output up to an annual rate of 750,000 tons of P_2O_5 equivalent. This operation, a fine technical achievement, is scheduled to produce at capacity in fiscal 1978, with IMC taking 37 percent of the output for our own account. The remainder will be sold on long-term take-or-pay contracts. Longer range, the challenge will be to find the best markets for the output. Competition is formidable, and is likely to remain so.

Also possible is the production of uranium nuclear fuel from concentrated phosphate operations. A pilot plant is under construction.

Nitrogen, which is produced by our Chemical Group, is sold to fertilizer and industrial markets, primarily on long-term contracts. The relative strength of IMC's nitrogen position, based on our natural gas operations and efficiencies of our new ammonia plant, is discussed elsewhere in this report. But it is noted here that the supply available to the U.S. farmer exceeds demand, with the market certain to be highly competitive for

So with nitrogen we struggle a bit, and on every product we face escalating costs—which we can fight but not lick. But for the heart of the business—phosphate and potash mines and plants—the outlook is favorable, with the best opportunities where IMC is strongest; i.e., the export trade.

Animal Agriculture

Our six-month report to shareholders last January noted that IMC products sold to the livestock and poultry markets were becoming increasingly important to corporate results, and that to improve understanding of the company we would start discussing these products in fiscal 1978 as though they constituted a separate business. Some of the





Dr. Jess Henson, Technical Consultant, Veterinary Products: "Ralgro is a good product—reliable, safe, effective. But it isn't magic. Like any tool, it has to be used properly. And it has to fit the goals of the livestock producer. That's where my work comes in—to help provide the scientific data the industry needs to get the full economic benefits of Ralgro."

products are produced by our agricultural operations and some by our chemicals operations. Sold into both the feed ingredient market and the animal health market, these products in combination accounted for 11 percent of total corporate operating earnings in fiscal 1977.

The major product lines are phosphate and potassium feed ingredients for the animal feed industry; liquid and dry premixes for cattle in the Southwest; Ralgro anabolic growth-promoting implant for cattle and feedlot lambs; Baciferm antibiotic feed additive; and a choline chloride nutritional supplement. Both Baciferm and choline chloride are for hogs and poultry.

Lower feed costs and higher livestock and poultry prices have lifted growers' current incomes, and the outlook is for more animals on feed in fiscal 1978 than in fiscal 1977—cattle and hogs each up 4 percent, poultry up 5 percent. Animal feed consumption will likely rise by about 6 percent, with feed ingredient industry tonnages to the feed manufacturers up 8 to 10 percent. Ingredient dollar volume may be down a bit for the

industry because of somewhat lower year-to-year prices.

Sales of Ralgro, an IMC exclusive, are continuing to increase—up 84 percent in fiscal 1977. Ralgro speeds weight gains and improves feed efficiencies. Beef and sheep producers have realized a return of up to \$10 for each \$1 spent on the product. Market penetration depends upon educating the customer to Ralgro use and values. Obviously, the job calls for strong marketing backed by technical support.

For the longer term in animal agriculture, improved margins should come from increasing Ralgro sales and from the construction of two new phosphate feed ingredients plants. These plants, going up at our two-year-old phosphate chemicals operations at New Wales, Florida, will increase capacity for existing products and give us production of an ingredient we are not currently making.

One of the plants, a \$36 million operation to turn out calcium and ammonium phosphates for the livestock and poultry markets, is expected to come on stream in September, 1977—three

Don Lyons, Western Field Sales Manager, Animal Health and Nutrition (far left): "Marketing animal feed ingredients is a highly technical business today. That's where IMC has led in the industry—with seminars, formulation counseling, and individual help to customers."

Dick Hunt, Eastern Field Sales Manager, Animal Health and Nutrition: "Our division went through a year of consolidation as the livestock market continued weak for most of our products. But the industry is straightening itself out. Our customers are making money again."

months ahead of schedule. The second plant, an \$18 million project, will put us back into defluorinated phosphate production for poultry.

There will be a plus in defluorinated phosphate production through the latest technology in energy conservation — heat recycling systems, heating chains, and low gas flue loss. This conservation should permit operations at somewhat lower costs than competitors have.

IMC's products for animal agriculture add up to a solid business, and we have a strong position based on marketing and technical leadership.

Chemicals

IMC has \$361 million invested in the various operations that make up the IMC Chemical Group. Of this investment, 59 percent is committed to ammonia and to natural gas, the raw material for ammonia production. Ammonia is the source of nitrogen fertilizers, produced in various forms. Although approximately 81 percent of U.S. ammonia production is sold into agricultural markets, IMC plans to sell about 45 percent of its output to industrial users, primarily textile manufacturers.

Much has been written about ammonia and nitrogen production — new plants and the coming oversupply. While some observers confuse label capacity with production capability, and while no one can predict what will happen to natural gas supplies next winter, it is clear that production can exceed

demand for the next few years. This is going to be a highly competitive market.

IMC, with an ammonia label capacity of 750,000 tons annually, has captive and long-term contract commitments totaling approximately 88 percent of probable output. We own, or control,



Gene Roark, Vice President and General Manager, Gas and Oil

Division: "The Sterlington ammonia plants use 122 million cubic feet of natural gas a day. That's a lot of gas, and our principal job is to keep it coming. In this energy crisis, I think IMC had a great deal of foresight in undertaking internal efforts to discover and purchase gas reserves. We're about in balance, and we can see comfortable security for the next five to seven years."

substantial supplies of natural gas. Our total gas position is discussed on page 19.

Our costs, including gas, will range near the estimated industry mid-point; i.e., we believe 50 percent of the industry can produce at lower costs than we and 50 percent at higher costs.

The Chemical Group investment is highly skewed to ammonia and gas, but

Sam Marshall, Business and Community Relations Manager, Florida Agricultural Operations: "Our job is to reinforce what our sales people are doing, and to acquaint our customers with how much care goes into producing our products. We also work closely with community and environmental groups. It's nice to know you've earned a reputation as a good neighbor — with folks willing to talk instead of shout when something goes wrong."



50 percent of the Chemical Group's earnings in fiscal 1977 came from electrochemicals, nitroparaffins, carbon black, biochemicals, and other specialties. The markets for these lines tend to follow U.S. economic activity, and thus prospects for fiscal 1978 appear favorable.

Thinking longer range, we have built an oil and gas exploration and acquisition organization that added approximately 23 billion cubic feet of gas and 1.5 million barrels of oil to our reserve holdings in Louisiana last year. Given this capability, we have confidence that we can entertain expansion into related petrochemical ventures. A logical example is methanol. We have a substantial captive methanol requirement and many years of experience in the merchant market.

In the electrochemicals area, we have a \$14 million sodium chlorate plant under construction. This product is aggressively sought by the paper manufacturers as they strive to meet federal environmental standards applicable to the papermaking process. Also in electrochemicals we are expanding hydro-



Fletcher Allen, Manager, Chemicals Purchasing: "In setting up a corporate-wide program to increase purchasing from minority vendors, we've bumped into the fact that we're all creatures of habit. We've got to go out and locate some new suppliers, but we tend to keep buying from all the people we know. It's difficult to change."

chloric acid capacity and examining other outlets for the chlorine coming from our three chlor-alkali plants.

IMC is the only producer of nitroparaffins in the world, and we expect to be making decisions on future directions in fiscal 1978. Present basic capacity totals 85 million pounds a year through one

Jim Shipp, Director of Operations Planning, Petrochemicals: "With an ammonia plant, you're doing nothing but wasting natural gas when you're shutting down and starting up. So reliability was one of our biggest concerns in building IMC's new Sterlington ammonia plant. This plant was ready for feed gas to the unit on January 29, and we were producing ammonia by February 12—right on a 13-day cycle. That's fairly fantastic. I think what's more remarkable is that the unit operated 103 days prior to any trip-out, and then it was only down for about 20 hours."



plant at Sterlington, Louisiana. Derivative plants are located in Indiana and West Germany.

Nitroparaffins are a unique and use-

ket for the nitrogen we produce, explosives are important, and it is within that context that we consider the future of this business.

Peter Scott-Hansen, Director of International Marketing, Carbon Products: "Petroleum coke is used by the iron and steel industries, mostly outside the United States. We buy the coke from domestic petroleum refiners, who consider it a waste disposal problem, and we find markets into which it can be sold. Our function is really that of an intelligence clearing house—we put the distant needs together and make an economic proposition out of it."



ful family of chemicals and command, in some forms, good prices, and good margins.

The protective coatings, pharmaceutical, and textile industries are among many markets for NPs. The manufacturing process gives us four basic NPs, unfortunately in fixed ratios. The challenge is to develop markets within the rigidity of fixed ratios at the basic production level. We have identified 100 useful derivatives.

The thermal carbon black business contributed importantly to earnings in fiscal 1977, and it appears that there is a good place in the market for this high quality specialty material. It is made from natural gas. We are considering stepping up output at our Canadian carbon black plant in Alberta.

Industrial explosives, for which nitrogen is an ingredient, barely broke even in fiscal 1977, but will do substantially better in fiscal 1978. Viewed as a mar-

In summary: in ammonia and other hydrocarbons, IMC has built a resource base—natural gas—behind the Chemical Group, and this base gives us several ways to go in the future—a variety of interesting possibilities. In electrochemicals, we are pretty well situated in a regional market, and the products can be counted on for a return on investment above the corporate average. The chemicals business earned 8.5 percent in fiscal 1977 on the capital invested. A reasonable long-term goal seems to be 12 percent, but that will not be achieved until the ammonia market returns to more normal supply-demand relationships.

Industry

For the Industry Group, fiscal 1977 was a year of contrasts. Ferroalloys, foundry resins, foundry minerals, and other related products fared very well in tough markets. Carbon products, mainly petroleum coke, suffered with

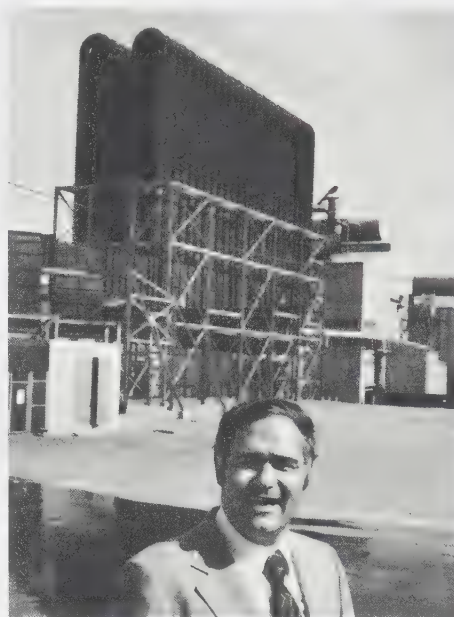
the economies of Europe and, to a lesser extent, of Japan.

Against this background, a good part of the Industry Group starts fiscal 1978 with the confidence that comes from strong forward momentum and the prospect of steady improvement in some key markets. Carbon, struggling in really poor markets, has acquired a substantial number of new customers, and these customers, plus normal relationships, provide a good opportunity for modest sales increases. However, improvement in margins is not likely until the steel industry takes an upturn in international markets.

Although it is impossible to predict the turn for European steel, trends in some other areas are up, and it seems reasonable to expect an increase in capital goods commitments in the United States. Fortunately, we make and sell a broad product line, a sound and solid base. On balance, a modest gain in earnings in fiscal 1978 seems an appropriate expectation. Longer range, a number of developments appear important.

In our existing lines of business, expansion projects and new products should help with the job of building margins longer term. Expansion has been completed in ferrosilicon; construction is on schedule to expand production of chrome ore; and we are expanding output of Oliflux, a proprietary blast furnace additive sold to the steel industry. New resins and core-making machines have been developed to meet an urgent and continuing need for energy conservation in the foundry industry, and a recent acquisition has

added latex emulsions to the resins line. Petroleum coke is seeing greater use as fuel by U.S. utilities, a trend that seems likely to continue.



Our recent purchase of a metallurgical coal property gives us a good beginning in this business. Annual output from this property is to be tripled to 1.5 million tons in the next two to three years, and in due course additional resources will be acquired.

In the meantime, we will be looking for other new nucleus businesses for the Industry Group.

The long-term goal is to more than double operating earnings—through expanding the newly acquired coal business, improvement in carbon product margins, entry into new businesses, and better economic conditions in our markets.

Don Freas, General Manager of Operations, Ferroalloys and Metals: "We brought the new Bridgeport ferrosilicon plant on stream ahead of schedule and below budget. I think we were able to do it because a lot of people gave it a lot of close attention. They wanted to see a good result. Now every effort must be made to keep the operation as efficient as possible. And it should be a clean operation—our anti-pollution system accounted for \$7.5 million of capital investment."

Joe Doninger, General Manager, McWhorter Resins: "We made record resins sales in fiscal 1977 by responding to customers' needs—tailoring the product to do the specific job, and providing technical support. We're in the forefront right now of water-based resin technology, helping customers develop new coatings formulation practices before the government forces them to greatly reduce the use of solvents."



Principal Operations

Net
Fixed Assets

Fixed Asset
Additions

	(in millions)	1977	(in millions) 1976
Agriculture	Phosphate Rock	\$142.9	\$ 16.0
	Concentrated Phosphates		\$ 32.9
		133.3	32.8
	Potash		5.9
Chemicals	Mixed Fertilizers	141.2	9.9
	Other		35.9
	Hydrocarbons	7.2	1.6
		4.4	.7
		<u>\$429.0</u>	<u>\$ 61.0</u>
Industry		\$241.1	\$ 81.5
	Industrial & Organic Chemicals		\$ 99.1
	Biochemicals	38.4	7.9
	Ferroalloys & Metals	4.1	1.1
		<u>\$283.6</u>	<u>\$ 90.5</u>
		\$ 38.0	\$ 17.5
	Carbon Products		
	Foundry Products and Other	3.5	.5
		15.8	3.0
		<u>\$ 57.3</u>	<u>\$ 19.9</u>

Major Facilities	Annual Capacity	Shipments		
		1977	1976	
4 mines, 4 plants, Florida	12,500,000 tons	11,634,000 tons	11,614,000 tons	Reserves: 138 million tons in central Florida supporting current operations 10 years at present operating rate, plus approximately six years at lower rates.
Reserves and prospects, Florida	—	—	—	Feasibility studies continuing on 270 million tons of reserves 40-50 miles south of present operations; 10-year option on new site in east-central Florida.
Phosphate chemicals plant, Florida	750,000 tons P ₂ O ₅ equiv.	700,000 tons	469,000 tons	Produces phosphoric acid and uses it to make ammonium phosphates, triple superphosphate, feed phosphates.
Existing feed phosphate plant, Florida	400,000 tons	293,000 tons	289,000 tons	Plant to be sold during fiscal 1978.
New dicalcium feed phosphate plant, Florida	435,000 tons	—	—	On stream early in fiscal 1978, producing calcium and ammonium feed phosphates.
New defluorinated feed phosphate plant, Florida	100,000 tons	—	—	On stream summer 1978, producing defluorinated feed phosphates.
Phosphate fertilizer/feed phosphate plant, Ontario, Canada	130,000 tons P ₂ O ₅ equiv.	77,000 tons	62,000 tons	Produces phosphoric acid, superphosphate, dicalcium phosphate.
2 mines, 2 plants, Saskatchewan, Canada	4,200,000 product tons	2,889,000 tons*	2,427,000 tons*	Reserves: 1.5 billion tons of ore, supporting present operations in excess of 100 years.
Mine, plant, New Mexico	900,000 product tons	920,000 tons	755,000 tons	Reserves: 229 million tons of ore, supporting present operations in excess of 25 years.
Prospect, New Brunswick, Canada	—	—	—	Potash and salt prospect under study; good technical possibilities.
6 granulation plants, 38 bulk-blending plants, Southeastern, Midwestern U.S.	1,000,000 tons	814,000 tons	768,000 tons	Finished fertilizers, with 59% premium brands.
Liquid feed operations, land development	—	—	—	Includes land development business related to Florida mining, miscellaneous other assets.
Gas operations and reserves, Louisiana	Not applicable	11,426 MMCF	7,193 MMCF	Reserves: 134 billion cubic feet of natural gas; 7.6 million barrels of crude oil and condensate, and natural gas liquids. Additional 55 million cubic feet of gas per day for Sterlington plant on contract, subject to curtailment.
2 ammonia plants, Louisiana	750,000 tons (label)	554,000 tons	233,000 tons	Second plant on stream February, 1977.
Basic nitroparaffins (NPs) plant, 3 NP derivatives plants, Louisiana; Indiana; West Germany	85,000,000 lbs. basic NPs	63,300,000 lbs.	60,700,000 lbs.	Produce nitromethane, nitroethane, nitropropanes, NP derivatives; derivatives capacity varies with product mix.
Explosives plants, Illinois; Utah	Not applicable	204,000 lbs.	185,000 lbs.	Produce industrial explosives and blasting agents.
Electrochemicals plants, New York (40% IMC-owned); Maine; Ohio	287,000 tons	224,000 tons	213,000 tons	Produce chlor-alkalis, including chlorine, caustic potash, caustic soda, hydrochloric acid.
Feldspathic mines, North Carolina; Virginia; Ontario, Canada	480,000 tons	434,000 tons	407,000 tons	Produce feldspar, nepheline syenite, aplite, quartz, brick coatings. Reserves will support current operations 75 years at present operating rates.
Animal implant manufacture, Indiana	Not applicable	62,827,000 pellets	39,031,000 pellets	Produces anabolic animal implants and other products.
Ferrosilicon plant, Alabama	75,000 tons	43,000 tons	47,000 tons	40-megawatt furnace on stream April, 1977 (75% IMC-owned).
Ferrosilicon plant, Tennessee	40,000 tons	22,000 tons	25,000 tons	22-megawatt furnace.
Ferroalloys plants, Luxembourg and Mexico (minority ownerships); Canada	6,600 tons	3,300 tons	2,200 tons	Produce ferroalloys of columbium, molybdenum, titanium, tungsten, vanadium.
Chrome ore mine, South Africa	330,000 tons	285,000 tons	224,000 tons	Expansion to 550,000-ton annual capacity scheduled for completion during fiscal 1978. Reserves will support operations 31 years at planned production rates.
Fluorspar mines, plants, Mexico and Kenya (minority ownerships)	375,000 tons	252,000 tons	235,000 tons	Reserves will support current operations 82 years at present operating rates.
Coke calcining plants, Texas (50% IMC-owned); California	220,000 tons	166,000 tons	132,000 tons	Produce calcined petroleum coke, process green petroleum coke.
5 mines, 12 plants, various U.S. locations	500,000 tons	473,000 tons	473,000 tons	Produce resins, oils, clays, sands, core molding machines. Reserves will support current operations at present operating rates 30 years for bentonite, 15 years for refractory clays, 230 years for olivine.

*Includes 721,000 tons produced in 1977 and 464,000 tons in 1976 under a service agreement for AMAX Inc.

Key Managers

Agriculture Group

Marketing

Sidney T. Keel, *Agricultural Marketing*

Harry L. Carroll, *Domestic Marketing*

Robert J. Pearce, *Mixed Fertilizers*

Herbert T. Peeler, *Animal Health and Nutrition*

Christopher C. Williams, *Domestic Sales*

Frederick J. Blesi, *Product Management
and Development*

Luis J. Vergne, *Overseas Sales*

Erik C. Ekedahl, *Asia/Pacific Sales*

Richard R. Roch, *Materials Management*

Operations

Judson H. Drewry, *Agricultural Operations*

Billie B. Turner, *Florida Operations*

Allen P. Blackmore, *Ontario Phosphate Operations*

Colin A. Campbell, *Florida Minerals Operations*

Charles E. Childers, *Esterhazy Potash Operations*

T. Jackson Cleghorn, *Florida Land
Management and Development*

Thomas L. Craig, *Florida Chemicals Operations*

Dee L. Dibble, *Operations Administration*

Robert W. Hougland, *Carlsbad Potash Operations*

Finance

Oscar T. Stutsman, *Finance Manager*

Robert C. Braunecker, *Controller*

IMC Chemical Group, Inc.

Marvin B. Gillis, *President*

Lester G. Sobin, *Industrial and Organic Chemicals*

Graham W. McMillan, *Biochemicals*

Roger E. Secrist, *Hydrocarbons*

Ted R. Bialek, *Finance*

Paul G. Mount, *Materials Management*

Walter I. Swanson, *Controller*

Business Managers

O. Wayne Chandler, *Nitroparaffins*

Scott S. Chandler, *Veterinary Products*

Frank E. Daley, *Electrochemicals*

Lyle A. Holmes, *Industrial Minerals*

Robert E. Jones, Jr., *Petrochemicals*

Robert B. Kayser, *Operations,
Industrial and Organic Chemicals*

Gene E. Roark, *Gas and Oil*

James J. Roveda, *Industrial Chemicals*

Paul E. Sullivan, *Trojan Explosives*

Raymond E. Tuttle, *NYMA*

Keith S. Wood, *Chemicals International*

IMC Industry Group

Donald E. Phillips, *President*

Anton F. Kuzdas, *Executive Vice President*

Alan B. Wagner, *Administration*

John L. Dentzer, *Finance*

Donald L. Simandl, *Controller*

Business Managers

George T. Baebler, *Foundry Products*

Nugent Comyn, *Lavino S.A.*

Joseph E. Doninger, *McWhorter Resins*

Eric Lomnitz, *Continental Ore Europe Ltd.*

John T. Lumis, *Carbon Products*

I. David Paley, *Ferroalloys and Metals*

Henry Siegmann, *Minera Continental S.A.*

International Minerals & Chemical Corporation (Canada) Limited

Mervyn A. Upham, *President*

	Years ended June 30	1977	1976	1975	1974	1973
Net Sales: Agriculture						
Phosphate rock	\$	138.4	201.6	208.8	75.4	45.0
Concentrated phosphates		195.1	190.2	101.3	60.6	44.0
Potash		103.8	104.0	115.7	81.6	57.5
Mixed fertilizers		108.9	99.5	115.9	96.1	74.9
Other		56.5	58.3	206.9	103.0	20.9
	\$	602.7	653.6	748.6	416.7	242.3
Net Sales: Chemicals						
Hydrocarbons	\$	144.5	108.9	16.0	—	—
Industrial and organic chemicals		140.2	126.6	100.4	67.9	—
Biochemicals		21.6	19.7	4.0	—	—
	\$	306.3	255.2	120.4	67.9	—
Net Sales: Industry						
Carbon products	\$	182.0	167.8	210.6	80.8	66.7
Ferroalloys		135.9	128.6	161.7	77.6	62.6
Foundry products		40.7	34.5	32.7	26.4	23.2
Other		12.6	20.3	28.9	189.1	153.1
	\$	371.2	351.2	433.9	373.9	305.6
	\$	1,280.2	1,260.0	1,302.9	858.5	547.9
Operating Earnings*						
Agriculture	\$	135.8	210.2	234.3	103.2	44.6
Chemicals		53.9	25.8	23.9	6.7	—
Industry		34.0	37.1	45.2	15.7	11.0
	\$	223.7	273.1	303.4	125.6	55.6
Net Earnings*						
Agriculture	\$	73.4	114.9	131.4	53.6	23.1
Chemicals		22.2	6.4	12.2	3.2	—
Industry		12.6	13.9	18.1	.5	2.3
	\$	108.2	135.2	161.7	57.3	25.4
Invested Capital						
Agriculture	\$	553.6	533.2	530.2	387.7	311.2
Chemicals		361.1	299.1	207.9	66.8	—
Industry		141.6	118.6	82.6	61.2	79.9
Return on Invested Capital						
Agriculture		14.1%	22.7%	26.1%	14.8%	8.5%
Chemicals		8.5	3.9	7.1	5.7	—
Industry		12.3	14.7	24.6	6.0	6.1

*Before extraordinary items in 1975, 1974, and 1973.

Note: Operating earnings are before interest, corporate general income and expenses, and taxes on income. Net earnings include income tax provisions that relate to each group's results of operations and after-tax interest and corporate general income and expenses that have been allocated among the businesses based principally on sales and invested capital.

Return on invested capital is based on net earnings plus after-tax interest divided by year-end shareholders' equity and long-term debt.

Five-Year Comparison

	Years ended June 30	1977	1976	1975	1974	1973
Summary of Operations (In millions except per share amounts)						
Revenues		\$1,296.5	1,278.5	1,331.7	871.8	556.8
Operating costs and expenses		1,097.5	1,023.5	1,033.8	750.4	507.8
Loss on investments and discontinued operations		—	—	—	8.7	—
Interest charges		34.9	29.8	23.3	16.5	13.1
Earnings before income taxes and extraordinary items		164.1	225.2	274.6	96.2	35.9
Provision for income taxes		55.9	90.0	112.9	38.9	10.5
Earnings before extraordinary items		108.2	135.2	161.7	57.3	25.4
Extraordinary items*		—	—	4.2	13.0	.7
Net earnings		108.2	135.2	165.9	70.3	26.1
Preferred stock dividend requirements		.8	1.2	1.9	2.7	2.1
Net earnings for common shares		107.4	134.0	164.0	67.6	24.0
Per Share Data						
Primary earnings—before extraordinary items		\$6.09	7.73	9.90	3.58	1.57
Primary earnings—net		6.09	7.73	10.16	4.43	1.62
Fully diluted earnings—before extraordinary items		5.93	7.38	8.89	3.18	1.45
Fully diluted earnings—net		5.93	7.38	9.13	3.90	1.49
Common dividends		2.45	2.10	1.38	.57	.29
Book value		35.64	31.94	25.89	16.72	12.77
Average shares—primary		17.6	17.3	16.1	15.2	14.9
Average shares—fully diluted		18.2	18.3	18.2	18.1	17.2
Other Data (Dollars in millions)						
Total assets		\$1,368.6	1,267.1	1,097.3	755.4	564.5
Working capital		254.9	277.5	183.9	194.7	131.4
Property, plant, and equipment, net		778.6	684.2	544.9	307.9	234.8
Long-term debt, less current maturities		387.0	389.5	306.3	255.2	155.5
Shareholders' equity		649.3	579.5	456.9	308.3	248.8
Invested capital		1,036.3	969.0	763.2	563.5	404.3
Capital expenditures		174.8	165.0	165.3	99.4	22.0
Depreciation and depletion		67.7	54.8	34.1	24.4	17.5
Returns based on earnings before extraordinary items						
Net sales		8.5%	10.7%	12.4%	6.7%	4.7%
Shareholders' equity		16.7%	23.3%	35.4%	18.6%	10.2%
Invested capital		12.1%	15.5%	22.7%	11.6%	7.9%
Number of shareholders, including beneficial owners		36,800	31,180	29,800	29,500	35,094
Number of employees		9,861	9,674	10,455	6,589	6,165
Common shares outstanding at end of fiscal year (In millions)		17.9	17.5	16.5	15.1	14.8

The summary of operations and other data for 1976 and earlier years have been restated for the retroactive effect of adopting new standards of accounting for leases. The change reduced previously reported net earnings by \$.1 million to \$.2 million (1¢ to 2¢ per share).

*In 1975 and 1974, loss carryforward tax credits; in 1973, loss carryforward tax credits, net of provisions for losses on discontinued operations. In 1974, IMC changed its accounting criteria for extraordinary items. If applied in earlier years, earnings before extraordinary items would have been \$23.6 million (\$1.45 per share) for 1973.

Analysis of Earnings Change

Sales of \$1,280 million were up slightly—\$20 million in 1977 from 1976—after a decline of \$43 million in 1976 from 1975, the peak year in IMC's history. In most instances, sales volumes were higher in 1977 compared with 1976, but these gains were nearly offset by lower per unit realizations. In 1976, the decline in sales was attributable to lower sales volumes.

Gross margins—sales less cost of goods sold—were down in both year-to-year comparisons and as a percentage of sales. These comparisons are summarized as follows:

	Sales	Gross Margins	% of Sales
1977	\$1,280.2	\$289.6	22.6
1976	1,260.0	325.6	25.8
1975	1,302.9	348.3	26.7

Gross margins were affected by the sales factors mentioned previously. In addition, increases in unit costs—primarily from inflation—had an adverse impact in each year-to-year comparison.

Agriculture sales and earnings in 1977 were lower than 1976 levels, which in turn were lower than 1975 levels. The 1977 declines are primarily the result of lower volume and prices for phosphate rock sold overseas; lower costs, including a decrease of approximately \$10 million in Saskatchewan mining fees and taxes, were partially offsetting factors. The 1976 declines reflect a return to more normal conditions after nearly two years of record demand; lower volumes and higher costs, including an increase in Saskatchewan mining fees and taxes of about \$8 million, were offset in part by higher average selling prices.

The Chemical Group's sales and earnings in 1977 increased significantly from a year ago as a result of production from the new 1,150-ton-per-day ammonia plant and higher volumes and

selling prices for most hydrocarbon products. In 1976, the Group's contribution to IMC's earnings was reduced from a year earlier because of ammonia and nitroparaffin production problems in the first half of 1976. Late in fiscal 1975, Commercial Solvents Corporation (CSC), since renamed IMC Chemical Group, Inc., became a wholly-owned subsidiary in a purchase transaction. Prior to that date, IMC's revenues included its 46 percent equity in CSC's earnings. If CSC had been a wholly-owned subsidiary throughout fiscal 1975, consolidated revenues and net earnings would have increased \$174.8 million and \$6.5 million, respectively.

The European and Japanese steel industries operated in a depressed condition during both 1977 and 1976 in relation to 1975 and those conditions adversely affected Industry Group sales and earnings from petroleum coke. The lower earnings contribution from petroleum coke was partially offset by earnings improvements in the ferroalloy and foundry sectors of that business.

Selling, administrative, and general expenses increased \$17.8 million in 1977 and \$10.0 million in 1976. These increases are partly from the inflationary effect on salaries and other expenses, and partly from additional expense from staff expansion and outside fees to comply with expanding government regulations—EPA, OSHA, SEC, FTC, EEO, ERISA, et al.

The additional interest expense of \$5.1 million in 1977 and \$6.5 million in 1976 primarily results from the full-year effect in 1977 and first-year effect in 1976 of the 9.35% sinking fund debenture offering of November, 1975.

Income taxes were lower in 1977 from lower earnings and a lower effective rate (34% vs. 40%) caused by greater investment credits and U.S. foreign tax credits in 1977. For 1976, the provision was also lower, principally because of lower earnings as well as a lower effective rate from earnings mix and tax credits on dividends from foreign subsidiaries.

On a per share basis, primary earnings declined \$1.64, or 21%, in 1977 from 1976 and \$2.43, or 24%, in 1976 from 1975. Part of the decline in both years is caused by an increase in average shares chiefly from conversions of preferred stock and debentures. Fully diluted earnings of \$5.93 in 1977 represented 97.4% of primary earnings; \$7.38 in 1976, 95.5%; and \$9.13 in 1975, 89.9%.

Worldwide Business

An important part of IMC's total revenues consists of sales of products exported from the United States plus sales of products produced outside the United States and sold anywhere in the world, including the United States. There follows a break-out of the market mix.

	1977		1976	
U.S. sales of				
U.S.-produced products	\$ 724.9	57%	\$ 670.1	53%
Export sales from U.S.	340.8	27	386.8	31
Sales of products produced in Europe	47.6	4	42.7	3
Sales of products produced in Canada	146.4	11	138.6	11
Sales of other foreign-produced products	20.5	1	21.8	2
	\$1,280.2	100%	\$1,260.0	100%

The most significant exports from the U.S. are sales of phosphate rock. Other important exports include concentrated phosphates, potash, and petroleum coke.

Foreign subsidiaries contributed \$23 million to consolidated net earnings in 1977, almost the same as in 1976. Export sales were an important contributor to net earnings.

Financial Condition

- Receivables as a percentage of sales were 16% at June 30, 1977, about the same as a year ago. The practice of stringent control of credit continues.
- Inventories of \$220 million increased by \$6 million from 1976, generally from higher unit costs. Petroleum coke inventories remained on the high side although reduced from the close of 1976. Otherwise quantities were in line with operating levels.
- Short-term debt increased \$20 million, used to finance European working capital requirements.
- Long-term debt at June 30, 1977, was \$387 million, compared with \$390 million a year ago. IMC did not raise any major amounts of new debt during the year. Long-term debt represented 37 percent of invested capital at year-end, down from 40 percent at the close of 1976.
- In 1977, all the remaining convertible preferred stock and \$4 million of the 4% convertible subordinated debentures were converted into 474,676 shares of IMC common stock. Looking ahead to fiscal 1978, these conversions should result in about the same number of shares used in the calculation of both primary and fully diluted earnings per share.

	Quarter	First	Second	Third	Fourth
Common Stock Prices and Dividends					
Fiscal 1977					
Dividends per share	\$.60	\$.60	\$.60	\$.65
Common stock prices					
High		40¼	41¼	44½	44
Low		33¼	36⅝	37⅞	40⅜
Fiscal 1976					
Dividends per share	\$.50	\$.50	\$.50	\$.60
Common stock prices					
High		46⅝	44½	42¼	38⅝
Low		36⅞	32⅝	35⅜	32¾

Quarterly Data

(In millions except per share amounts)	Quarter	First	Second	Third	Fourth
Fiscal 1977					
Net sales					
Agriculture		\$125.0	137.3	164.4	176.0
Chemicals		69.6	72.6	81.1	83.0
Industry		85.5	91.3	86.2	108.2
		280.1	301.2	331.7	367.2
Operating earnings					
Agriculture		27.9	38.7	37.8	31.4
Chemicals		15.4	12.4	11.6	14.5
Industry		8.4	7.7	8.2	9.7
		51.7	58.8	57.6	55.6
Corporate general income and expenses and interest charges		12.6	14.1	14.0	18.9
Earnings before income taxes		39.1	44.7	43.6	36.7
Provision for income taxes		14.5	16.8	16.4	8.2
Net earnings		24.6	27.9	27.2	28.5
Earnings per share					
Primary	\$	1.38	1.59	1.52	1.60
Fully diluted		1.34	1.54	1.49	1.56
Fiscal 1976					
Net sales					
Agriculture		\$147.9	163.0	166.2	176.5
Chemicals		58.6	53.0	69.9	73.7
Industry		85.7	97.7	84.2	83.6
		292.2	313.7	320.3	333.8
Operating earnings					
Agriculture		55.2	65.0	50.4	39.6
Chemicals		4.2	(1.2)	13.9	8.9
Industry		8.3	11.1	9.2	8.5
		67.7	74.9	73.5	57.0
Corporate general income and expenses and interest charges		11.3	9.9	9.6	17.1
Earnings before income taxes		56.4	65.0	63.9	39.9
Provision for income taxes		24.3	27.3	27.7	10.7
Net earnings		32.1	37.7	36.2	29.2
Earnings per share					
Primary	\$	1.86	2.16	2.07	1.64
Fully diluted		1.75	2.06	1.97	1.60

Fourth Quarter Results

Fourth quarter net earnings were \$28.5 million compared with \$29.2 million a year ago, a 2 percent decline. Compared with this year's third quarter, net earnings increased \$1.3 million or 5 percent. Both fourth quarter results reflect the adoption of new standards of accounting for leases which had an insignificant effect on net earnings.

Operating earnings declined slightly from a year ago, with the Chemical Group earnings increase largely offsetting lower Agriculture earnings. Much of the Chemical Group increase comes from higher shipments of ammonia to industrial and agricultural customers, with the second plant on stream throughout the quarter. Chemicals and Industry contributed 44 percent of total operating earnings, up from 30 percent a year ago and 34 percent in this year's third quarter. Agriculture fourth quarter earnings were less than last year primarily as a result of lower selling prices on phosphate rock exports. Agriculture earnings were also less than this year's third quarter due to a decrease in the volume of exports of phosphate rock.

Income tax provisions in the 1977 fourth quarter were lower than last year's fourth quarter and this year's third quarter due to lower pre-tax earnings and a change in the estimate of U.S. foreign tax credits. Income tax provisions in 1976's fourth quarter were lower than 1976's third quarter as a result of lower earnings and a change in the estimate of the effective Canadian income tax rate. The 1977 fourth quarter's effective tax rate was 22.3 percent compared with 26.8 percent a year ago and 37.6 percent in the March quarter.

Consolidated Statement of Earnings

(In millions except per share amounts)	Years ended June 30	1977	1976
Revenues			
Net sales		\$1,280.2	\$1,260.0
Interest earned and other income, net		16.3	18.5
		1,296.5	1,278.5
Costs and expenses			
Cost of goods sold		990.6	934.4
Selling, administrative, and general expenses		106.9	89.1
Interest charges		34.9	29.8
		1,132.4	1,053.3
Earnings before income taxes		164.1	225.2
Provision for income taxes		55.9	90.0
Net earnings		\$ 108.2	\$ 135.2
Earnings per common and common equivalent share			
Primary		\$ 6.09	\$ 7.73
Fully diluted		5.93	7.38

(See Notes to Consolidated Financial Statements)

Consolidated Balance Sheet

Assets (In millions)	At June 30	1977	1976
Current assets			
Cash	\$	14.8	\$ 18.0
Deposits and short-term investments, at cost which approximates market		67.2	70.0
Receivables, less allowances of \$8.8 in 1977 and \$7.1 in 1976		202.3	195.0
Inventories			
Products (principally finished)		186.4	184.2
Operating materials and supplies		34.0	29.7
		220.4	213.9
Prepaid expenses		8.1	15.6
		512.8	512.5
Investments and long-term receivables, less allowances of \$9.0 in 1977 and \$7.6 in 1976		47.1	41.9
Property, plant, and equipment		1,071.6	920.7
Accumulated depreciation and depletion		293.0	236.5
Net property, plant, and equipment		778.6	684.2
Deferred royalties and other assets		30.1	28.5
		\$1,368.6	\$1,267.1

Liabilities and Shareholders' Equity

Current liabilities			
Notes payable	\$	33.5	\$ 13.9
Accounts payable		113.9	119.0
Accrued liabilities		53.3	61.1
Income taxes		37.3	31.1
Current maturities of long-term debt		19.9	9.9
		257.9	235.0
Long-term debt, less current maturities		387.0	389.5
Deferred income taxes		47.1	37.6
Non-current liabilities and deferred credits		27.3	25.5
		74.4	63.1
Shareholders' equity		649.3	579.5
		\$1,368.6	\$1,267.1

(See Notes to Consolidated Financial Statements)

Consolidated Statement of Retained Earnings

(In millions except per share amounts)	Years ended June 30	1977	1976
Retained earnings at beginning of year			
As previously reported			\$335.3
Retroactive adjustment for capitalized leases			1.0
As restated		\$432.0	334.3
Net earnings		108.2	135.2
		540.2	469.5
Cash dividends paid			
Preferred stock		.8	1.2
Common stock (1977, \$2.45 per share; 1976, \$2.10 per share)		43.2	36.3
		44.0	37.5
Retained earnings at end of year		\$496.2	\$432.0

(See Notes to Consolidated Financial Statements)

Consolidated Statement of Changes in Financial Position

(In millions)	Years ended June 30	1977	1976
Source of funds			
Net earnings		\$108.2	\$135.2
Depreciation and depletion		67.7	54.8
Deferred income taxes		7.2	10.7
Other		6.2	15.9
Total from operations		189.3	216.6
Issuance of common stock			
Conversion of Series preferred stock		12.0	7.3
Conversion of 4% debentures		4.3	22.9
Exercise of options		.5	1.7
Long-term debt		25.7	124.9
Sale of property, plant, and equipment		11.4	6.9
		243.2	380.3
Use of funds			
Capital expenditures		174.8	165.0
Property, plant, and equipment of acquired businesses		—	38.3
Dividends		44.0	37.5
Reduction in long-term debt		28.2	41.7
Conversion of Series preferred stock		12.0	7.3
Increase (decrease) in investments and long-term			
receivables		5.5	(7.4)
Other net changes in financial position		1.3	4.2
		265.8	286.6
Decrease (increase) in working capital		\$ 22.6	\$ (93.7)
Decrease (increase) in working capital by component			
Cash and short-term investments		\$ 6.0	\$ (22.2)
Receivables		(7.3)	1.3
Inventories		(6.5)	(11.6)
Prepaid expenses		7.5	(10.7)
Notes payable		19.6	3.8
Accounts payable and accrued liabilities		(12.9)	7.8
Income taxes		6.2	(62.3)
Current maturities of long-term debt		10.0	.2
Decrease (increase) in working capital		\$ 22.6	\$ (93.7)

(See Notes to Consolidated Financial Statements)

Notes to Consolidated Financial Statements

(Dollars in millions except per share amounts)

Accounting Policies

Principles of Consolidation Financial statements of all significant subsidiaries are consolidated. Investments in nonconsolidated subsidiaries and significant partially owned companies where ownership exceeds 20 percent are carried at cost, adjusted for appropriate amortization of intangibles, allowances for losses, and equity in net earnings or losses. The excess purchase cost over fair value of net assets of businesses acquired is amortized over periods of up to 40 years.

Inventories Inventories are stated at the lower of cost or market (net realizable value). Cost is determined on the basis of cumulative annual averages and specific items.

Exploration and Development Costs Mineral exploration costs are charged to expense as incurred. Gas and oil exploration costs, including drilling costs, that relate to unsuccessful fields are charged to expense. Mine development costs and costs of development wells and commercially successful exploratory wells, including related exploration costs, are capitalized.

Property, Plant, and Equipment Property, plant, and equipment are recorded at cost. Repairs and maintenance are charged to expense as incurred; major renewals and improvements are capitalized. Upon sale or other retirement of property, the cost and accumulated depreciation or depletion are removed from the accounts and any gain or loss is included in earnings. Depreciation is provided over estimated useful lives of 17 to 50 years for buildings and 5 to 20 years for machinery and equipment, using principally straight-line and unit-of-production methods. Depletion and amortization of mineral, gas, and oil properties and rights are provided under the unit-of-production method based upon estimates of recoverable reserves or deliveries under contract.

Pension Plans IMC has pension plans that cover substantially all of its employees. Annual contributions are made for normal and past service costs as accrued. Past service costs are being amortized generally over a 30-year period.

Income Taxes Investment tax credits are applied as available as a reduction of income tax expense. Income taxes are provided on the earnings of foreign subsidiaries to the extent that such earnings are expected to be remitted.

Leases In 1977, IMC adopted retroactively new standards of accounting established by the Financial Accounting Standards Board for leases. As a consequence, certain leases that were formerly considered to be operating leases were classified as capital leases. The change, which did not have a material effect on the consolidated financial statements, reduced net earnings in 1977 by \$.2 million (1¢ per share) and reduced previously reported 1976 net earnings by \$.2 million (2¢ per share).

Earnings Per Common and Common Equivalent Share

Primary earnings per share has been computed by dividing net earnings less preferred stock dividend requirements by the weighted average number of common and common equivalent shares outstanding. Common equivalent shares include dilutive stock options and shares awarded under incentive compensation plans.

Fully diluted earnings per share is based on primary earnings per share, adjusted for dilutive stock options at end-of-period market prices and for the assumed conversion of the 4 percent convertible subordinated debentures and Series preferred stock at the beginning of each year. In these computations, interest on those debentures (net of income tax effect) and dividends on Series preferred stock have been added to earnings applicable to common shares. Shares used in the computation are as follows:

	1977	1976
Weighted average common shares		
Outstanding	17,528,910	17,099,220
For stock options	70,465	125,156
For incentive compensation plans	25,200	98,832
Total for primary earnings per share	17,624,575	17,323,208
Additional shares for conversion		
4% debentures	253,087	437,177
Series preferred stock	333,241	542,191
Additional shares for stock options	17,016	7,525
Total for fully diluted earnings per share	18,227,919	18,310,101

Acquisitions

In July, 1977, IMC purchased operating metallurgical coal properties for approximately \$36 million in cash and 54,082 shares of IMC common stock. In 1976, IMC purchased substantially all of the operating assets of a privately held gas and oil producing company for approximately \$38.5 million cash.

Inventories

Product inventories at June 30, 1977 and 1976, were as follows:

	1977	1976
Agriculture	\$ 65.8	\$ 59.9
Chemicals	40.1	31.9
Industry	70.9	80.4
Land held for sale	9.6	12.0
	\$186.4	\$184.2

Investments and Long-term Receivables

Investments and long-term receivables at June 30, 1977 and 1976, were as follows:

	1977	1976
Investments in and advances to nonconsolidated subsidiaries and partially owned companies, less allowances of \$4.5 in 1977 and \$6.2 in 1976	\$23.5	\$26.4
Long-term receivables and other investments, less allowances of \$4.5 in 1977 and \$1.4 in 1976	23.6	15.5
	\$47.1	\$41.9

At June 30, 1977, the investment in Chemical Leaman Tank Lines, Inc., was stated at \$7.3 million; the market value of this investment was about \$4.3 million. In view of IMC's 26 percent ownership in this company, quoted market value may not be indicative of actual fair value for this investment.

Property, Plant, and Equipment

Major classes of property, plant, and equipment at June 30, 1977 and 1976, were as follows:

	1977	1976
Land	\$ 19.2	\$ 18.6
Mineral, oil, and gas properties and rights	180.4	146.5
Buildings and leasehold improvements	168.0	140.4
Machinery and equipment	622.3	492.7
Construction in progress	81.7	122.5
	1,071.6	920.7
Accumulated depreciation	267.6	217.8
Accumulated depletion	25.4	18.7
	293.0	236.5
Net property, plant, and equipment	\$ 778.6	\$684.2

In 1977, IMC adopted retroactively new standards of accounting for leases; accordingly, machinery and equipment at June 30, 1977 and 1976, included \$27.7 million that related to certain leases of railroad cars and other transportation equipment that have been classified as capital leases.

Income Taxes

The provision for income taxes consisted of the following:

	1977	1976
Federal		
Current	\$11.6	\$51.1
Deferred	9.4	10.6
	21.0	61.7
State and local		
Current	5.2	8.1
Deferred	.8	.8
	6.0	8.9
Foreign		
Current	31.9	20.5
Deferred	(3.0)	(1.1)
	28.9	19.4
	\$55.9	\$90.0

A reconciliation between taxes computed at the 48 percent federal statutory rate and the consolidated effective tax rate was as follows:

	1977	1976
Computed tax at federal statutory rate	\$78.8 48.0%	\$108.1 48.0%
Investment tax credits	(13.5) (8.2)	(6.6) (2.9)
Percentage depletion	(12.8) (7.8)	(16.3) (7.2)
U.S. foreign tax credit carryback	(5.1) (3.1)	(2.7) (1.2)
Other items (none in excess of 5% of computed tax)	8.5 5.2	7.5 3.3
Consolidated effective tax	\$55.9 34.1%	\$ 90.0 40.0%

Deferred income tax provisions result from differences in the timing and reporting of income and expense elements for financial reporting purposes as opposed to tax purposes. In 1977 and 1976, deferred income tax provisions related principally to depreciation differences (\$6.4 million and \$4.2 million, respectively).

Long-term Debt

Long-term debt at June 30, 1977 and 1976, was as follows:

	1977	1976
9.35% debentures due 2000 in annual installments of \$6.5 million, beginning 1986, with final payment of \$9.0 million in 2000	\$100.0	\$100.0
7.45% promissory notes due 1994 in annual installments of \$7.5 million, beginning 1978, with final payment of \$20 million in 1994	140.0	140.0
8.25% promissory notes due 1988 with quarterly payments averaging \$2.3 million, beginning 1982	52.0	52.0
Variable interest notes due 1982 (1977—8.1%; 1976—8.7%) at 120% of prime with quarterly payments averaging \$1.5 million	29.1	34.0
7.75% industrial development revenue bonds due 2001 in equal annual installments of \$.8 million, beginning 1992	8.5	8.5
4% convertible subordinated debentures due in 1991	7.5	11.8
4.5% subordinated debentures due in 1991	7.6	7.9
Variable interest note (6.75%) due 1983 at prime with quarterly payments of \$.3 million, beginning 1978 and increasing to \$.8 million in 1980	13.5	—
Capital lease obligations	19.1	20.6
Other (5.0% to 9.75%) due 1978 to 1990	29.6	24.6
	406.9	399.4
Less current maturities	19.9	9.9
	\$387.0	\$389.5

The 9.35 percent debentures are redeemable at the option of IMC at prices ranging from 108.882 percent at June 30, 1977, to 100 percent in 1995 and thereafter.

The capital stock of New Wales Chemicals, Inc. (formerly IMC Chemicals Corp.) and its rights under certain contracts, including long-term sales arrangements covering a substantial portion of output of its phosphate chemical facility, serve as collateral for the 8.25 percent and the variable interest notes; IMC is obligated to purchase the notes in the event of default in payment by New Wales Chemicals.

The 7.75 percent industrial development revenue bonds are limited obligations of The Industrial Development Board of the City of Bridgeport, Alabama, and are guaranteed by IMC. The bonds are redeemable at prices ranging from 103 percent in 1986 to 100 percent in 1992.

The 4 percent convertible subordinated debentures require annual sinking fund payments of approximately \$1.9 million. As of June 30, 1977, IMC held a total of \$12.1 million principal amount of these debentures which may be applied toward any sinking fund payment. The debentures are currently convertible into common stock at \$37.98 per share and are redeemable at prices ranging from 102.70 percent in 1977 to 100 percent in 1986 and thereafter. In 1977 and 1976, \$4.3 million and \$22.9 million principal amount were converted into 113,666 and 600,717 common shares, respectively.

The 4.5 percent subordinated debentures may be converted at any time for cash at the rate of \$662 per \$1,000 principal amount of debentures. Annual sinking fund payments of \$1 million are required from 1978 through 1990. At June 30, 1977, a total of \$3.3 million had been purchased and \$7.4 million had been converted, all of which may be applied toward any sinking fund payments.

Maturities of long-term debt, excluding capital lease obligations, in millions for the next five years, assuming application of purchased 4 percent convertible debentures and purchased and converted 4.5 percent debentures to the earliest sinking fund payments, are as follows: 1978—\$18.3; 1979—\$19.8; 1980—\$23.1; 1981—\$22.2; 1982—\$22.3.

Certain debt agreements require maintenance of \$120 million consolidated working capital and restrict the payment of dividends and purchase, retirement, or redemption of capital stock. Consolidated retained earnings not restricted under these provisions amounted to \$225 million at June 30, 1977.

As previously noted, IMC adopted retroactively in 1977 new standards of accounting for leases. Future minimum lease payments under capital leases and the present value of those payments as of June 30, 1977, were as follows:

Years ending June 30	
1978	\$ 3.1
1979	3.1
1980	3.1
1981	3.1
1982	3.1
Later years	13.7
	29.2
Less amount representing interest	10.1
Present value of minimum lease payments	19.1
Less current portion	1.6
	\$17.5

Pension Plans

Pension expense was \$6.6 million for 1977 (\$5.4 million for 1976), including amortization of unfunded prior service costs. The actuarially computed value of vested benefits at June 30, 1977 (determined generally as of the preceding July 1), exceeded the total year-end market value of pension funds and balance sheet accruals for certain of the plans by \$2.3 million. The unfunded prior service cost under the plans approximated \$18 million at June 30, 1977.

Shareholders' Equity

Shareholders' equity at June 30, 1977 and 1976, was as follows:

	1977	1976
4% cumulative preferred stock—\$100 par, redeemable at \$110 per share, 100,000 shares authorized and issued, including 1,670 treasury shares	\$ 10.0	\$ 10.0
Series preferred stock—\$100 par, 192,743 shares authorized, none issued in 1977, 120,000 shares issued in 1976	—	12.0
Second Series preferred stock—\$1 par value, 3,000,000 shares authorized, none issued	—	—
Common stock—\$5 par, 50,000,000 shares authorized, 18,110,345 shares issued in 1977, 17,619,506 in 1976, including treasury shares, 166,129 in 1977 and 159,651 in 1976	90.5	88.1
Capital in excess of par value	54.7	39.6
Retained earnings	496.2	432.0
	651.4	581.7
Less treasury shares at cost	2.1	2.2
	\$649.3	\$579.5

In June, 1977, all of the outstanding Series preferred stock shares were converted into 361,010 common shares. In June, 1977, the Board of Directors recommended for shareholder approval the amendment of the Certificate of Incorporation to eliminate the 192,743 authorized shares of Series preferred stock, to redesignate the Second Series preferred stock as Series preferred stock, and to make certain other related changes. In fiscal 1976, 72,743 shares of Series preferred stock were converted into 218,841 common shares. Dividends of \$3.75 per share were paid in 1977 (1976, \$5 per share) on Series preferred stock and \$4 per share on 4 percent preferred were paid in 1977 and 1976.

Changes in common shares issued and capital in excess of par value in 1976 and 1977 were as follows:

	Common Shares	Amount	Capital in Excess of Par Value
Balance, June 30, 1975	16,680,657	\$83.4	\$12.1
Conversion of Series preferred and 4% debentures	819,558	4.1	26.1
Stock options exercised and related tax effects	119,291	.6	1.4
Balance, June 30, 1976	17,619,506	88.1	39.6
Conversion of Series preferred and 4% debentures	474,676	2.3	13.9
Stock options exercised and related tax effects	16,163	.1	.8
Contribution of treasury shares to employee stock ownership plan	—	—	.4
Balance, June 30, 1977	18,110,345	\$90.5	\$54.7

At June 30, 1977, common shares were reserved as follows:

Conversion of 4% debentures	198,551
Exercise of stock options	378,175
Incentive compensation plans	25,200
	601,926

In prior years, IMC acquired 68,649 shares of its common stock at an aggregate cost of \$1.0 million in connection with deferred compensation plans. Since IMC expects to pay the deferred compensation in cash, the shares were reclassified as treasury shares in 1977.

In 1976, 27,686 common treasury shares were acquired for \$1.1 million. In 1977 and 1976, IMC contributed to its employee stock ownership plan 15,156 and 28,199 common treasury shares to satisfy the accrued liability at the end of fiscal 1976 and 1975, respectively. The aggregate cost and aggregate market value of the shares contributed in 1977 were \$.2 million and \$.6 million, respectively (1976, \$1.1 million and \$1.1 million). In 1977, 47,015 treasury shares were issued for stock options exercised.

Foreign Subsidiaries

Summarized financial information for consolidated foreign subsidiaries is presented below. For net sales and net assets, intercompany transactions and accounts are included. For net earnings, intercompany transactions, except charges for administrative costs, are excluded.

	1977	1976
Net sales	\$312.6	\$279.0
Net earnings	23.2	23.6
Current assets	201.2	184.5
Investments and other assets	7.3	16.2
Net property, plant, and equipment	146.7	155.2
Total assets	355.2	355.9
Liabilities	147.3	167.3
Net assets	207.9	188.6
Retained earnings	\$186.2	\$172.2

Foreign currency translation losses in 1977 amounted to \$4.0 million. In fiscal 1976, translation gains were \$.3 million.

A substantial portion of undistributed retained earnings of consolidated foreign subsidiaries is considered to be permanently invested; accordingly, no income taxes have been provided for the repatriation of that portion of such earnings.

Stock Plans

Under a qualified stock option plan, which was adopted in 1964 and expired in September, 1973, options have been granted to officers and key employees to purchase common stock at prices of not less than 100 percent of market price at date of grant. These options are exercisable over five years beginning one year after the date of grant.

A non-qualified stock option plan adopted in 1973 provides for granting options to purchase up to 400,000 shares of common stock at prices of not less than 100 percent of market price at the date of grant. These options are exercisable over 10 years beginning one year after the date of grant and limited to 50 percent during the second year. A total of 320,641 shares were granted under this plan through June 30, 1977.

No amounts are charged to earnings in accounting for stock options. Information on options for 1977 and 1976 follows:

Number of Shares	Price Range	1977	1976
Outstanding at beginning of year	\$11 to \$46	249,996	374,553
Granted	36 to 39	103,000	1,000
Cancelled	11 to 39	1,001	6,266
Exercised	11 to 28	63,178	119,291
Outstanding at end of year	\$11 to \$46	288,817	249,996
At June 30			
Exercisable		181,984	190,188
Reserved for future option grants		89,358	192,358

Incentive compensation plans adopted in prior years provide for awarding to corporate officers and key employees common treasury shares, or cash equivalent, contingent upon achievement of specified earnings. Awards outstanding under two of the plans are vested. The major portion of the plans' awards were paid in cash in July, 1977; the balance of the awards has been deferred and under these deferrals a total of 33,212 common shares (or cash equivalent) will be issued or paid. In addition, a total of 10,200 common shares (or cash equivalent) may be issued under a third plan based on results of operations through June 30, 1977.

Saskatchewan Matters

In January, 1976, the Saskatchewan government enacted legislation authorizing the province to purchase or expropriate some or all of the potash-producing facilities in the province. Since October, 1976, the province has purchased the potash properties of two producers, is reported to have reached agreement with a third and to be evaluating a fourth.

IMC potash operations in Saskatchewan accounted for 7 percent of 1977 and 1976 consolidated sales and 9 percent of 1977 net earnings (7 percent in 1976). IMC's gross investment in the Saskatchewan potash facilities is about \$192 million. The estimated cost to reproduce these facilities substantially exceeds the gross investment.

The Saskatchewan government imposes a potash reserve tax and proration fee, the constitutional and contractual validity of which are being challenged in litigation brought by several Saskatchewan potash companies, including IMC. The companies seek a refund of the taxes and fees paid. The reserve tax and proration fee imposed by the Saskatchewan government on IMC amounted to \$21 million for fiscal 1977 and \$29 million for fiscal 1976. These potash taxes and fees, which are not deductible on the Canadian federal tax return, aggregate \$78 million for IMC since first imposed.

During the latter part of 1977, IMC evaluated and adjusted its accounts in respect of amounts claimed by the Saskatchewan government, based in part on agreement reached on certain adjustments affecting the computation of amounts claimed. The effect of these adjustments was not material.

Antitrust Proceedings

In May, 1977, IMC and other potash producers were found not guilty and were acquitted in criminal antitrust proceedings brought in 1976 by the United States government. In that case, the government had accused the defendants of allegedly conspiring to restrict the amount of potash produced in the United States, to stabilize and raise the price of potash produced and sold in the United States, and to restrict exports and imports. Following the acquittal, on motion by the government, the court in June, 1977, dismissed a related civil action.

Private treble damage actions, which were filed after the United States had brought its proceedings and which are based on allegations substantially similar to those involved in the federal government actions, are still pending before the United States District Court in Chicago, the court in which the criminal case was tried. The plaintiffs in these actions seek judgments in an amount equal to three times an unspecified amount of damages they allegedly have incurred. All of these suits purport to represent broad classes of potash buyers. Answers denying the substantive allegations in each of these actions were filed. Following dismissal of the federal government's civil case, a settlement agreement has been entered into in August, 1977, between the defendants in these private actions and plaintiffs representing a class consisting of direct purchasers of potash (believed to be the only proper plaintiffs under a recent decision of the U.S. Supreme Court). IMC's share of the amount to be paid to this class under the settlement agreement would not be material. Since the agreement is still subject to court approval and provides that the defendants may terminate the settlement on the happening of specified contingencies, the ultimate outcome of this litigation cannot yet be determined.

Federal grand jury investigations of the phosphate and nitrogen industries, initiated in 1975, continue under the direction of the Antitrust Division of the United States Department of Justice. Phosphate matters are being handled by a grand jury in Chicago, and nitrogen matters by a grand jury in New York.

Commitments

Major lease commitments covering mineral, oil, and gas properties and rights provide for the greater of minimum royalties, rentals, or royalties based on production. Minimum annual payments for each of the next five years under the leases range from \$3.1 million to \$3.2 million.

IMC leases railroad cars, office space, data processing equipment, and machinery and equipment. Most of the leases for railroad cars have been classified as capital leases, and substantially all of the other leases were considered to be operating

leases. Rent expense in 1977 and 1976, respectively, excluding mineral, oil, and gas property rents and net of mileage credits of \$3.0 million and \$2.4 million in 1977 and 1976, respectively, was \$12.3 million and \$11.3 million.

Minimum rent commitments at June 30, 1977, under operating leases with a remaining noncancellable period exceeding one year are set forth below. Rentals have not been reduced for estimated mileage credits.

Years ending June 30

1978	\$ 9.4
1979	7.6
1980	6.1
1981	4.4
1982	2.6
Later years	8.8
	<hr/> \$38.9

IMC-Canada is committed under a service agreement with a subsidiary of AMAX Inc. to produce annually, from mineral reserves sold in 1971, specified quantities of potash for a fixed fee. The initial term of the agreement, which expires in 1981, is renewable at the option of the buyer for six additional five-year periods. The agreement may be cancelled on retransfer of ownership of the reserves. The specified quantities may increase from approximately 721,000 tons in fiscal 1977 to a maximum of one million tons annually in fiscal 1978 and may further increase by 12.5 percent of any increase in total design capacity of the mines.

At June 30, 1977, IMC and certain consolidated subsidiaries had guaranteed \$5.1 million indebtedness of others.

A subsidiary is committed to pay minimum annual charter fees ranging from \$10.4 million in 1978 to \$2.4 million in 1981. In July, 1977, that subsidiary completed the purchase of a vessel for \$7.9 million; \$4.2 million of previously paid charter fees were applied toward the purchase price.

A customer of New Wales Chemicals, Inc., has an option, exercisable in 1980, to purchase a 19.8 percent interest in that company, subject to amendment of the loan agreement and related instruments, if required.

In 1976, IMC granted to the other owners of a French holding company a three-year option on its 49 percent interest. The option price approximated the net book value of that investment, and in 1977 the other owners exercised the option.

The majority of IMC's phosphate rock production sold domestically is sold at specified prices under long-term contracts, which generally provide for price escalations based on certain cost increases.

Major construction projects in progress at June 30, 1977, include two animal feed phosphate facilities and a sodium chlorate plant. Future expenditures on these projects are estimated to be approximately \$40 million.

Replacement Cost Information (Unaudited)

In accordance with rules of the Securities and Exchange Commission, IMC will include in its 1977 Annual Report on Form 10-K certain quantitative and other data on the estimated replacement cost of productive capacity and inventories at June 30, 1977, as well as cost of goods sold and depreciation expense based on estimated replacement costs during fiscal 1977. The Commission's rules presently exclude mineral, oil, and gas properties and rights and related mineral resource assets from replacement cost disclosure requirements. Accordingly, the aforementioned data contained in the Form 10-K report will not include the estimated replacement cost data for those assets, which constitute approximately 50 percent of gross property, plant, and equipment. As a consequence of inflationary pressures, the estimated replacement cost of productive capacity is significantly greater than historical cost. Those cost increases and other cost increases result in theoretical increases over historical costs in depreciation expense, cost of goods sold, and inventories. As indicated elsewhere, a copy of that report is available on request.

The amounts disclosed in the unaudited replacement cost note in the Form 10-K are based on hypothetical assumptions and substantial subjective judgments and may be affected by errors inherent in estimations. As discussed more completely in the Form 10-K, the replacement cost information should not be interpreted as indicative of the actual cost to be incurred in the future, nor the manner in which productive capacity will actually be replaced. For the foregoing reasons, IMC makes no representation that the replacement cost information is useful.

Quarterly Earnings Information (Unaudited)

	Quarter	First	Second	Third	Fourth
Fiscal 1977					
Net sales		\$280.1	\$301.2	\$331.7	\$367.2
Gross margins		65.0	73.6	75.3	75.7
Earnings before income taxes		39.1	44.7	43.6	36.7
Net earnings		24.6	27.9	27.2	28.5
Earnings per share					
Primary		\$ 1.38	\$ 1.59	\$ 1.52	\$ 1.60
Fully diluted		1.34	1.54	1.49	1.56
Fiscal 1976					
Net sales		\$292.2	\$313.7	\$320.3	\$333.8
Gross margins		82.5	89.3	85.9	67.9
Earnings before income taxes		56.4	65.0	63.9	39.9
Net earnings		32.1	37.7	36.2	29.2
Earnings per share					
Primary		\$ 1.86	\$ 2.16	\$ 2.07	\$ 1.64
Fully diluted		1.75	2.06	1.97	1.60

Income tax provisions in 1977's fourth quarter were lower than last year's fourth quarter and this year's third quarter due to lower pre-tax earnings and a change in the estimate of U.S. foreign tax credits. Income tax provisions in 1976's fourth quarter were lower than 1976's third quarter as a result of lower earnings and a change in the estimate of the effective Canadian income tax rate.

To the Shareholders and Directors of
International Minerals & Chemical Corporation

We have examined the accompanying consolidated balance sheet of International Minerals & Chemical Corporation at June 30, 1977 and 1976 and the related consolidated statements of earnings, retained earnings and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As discussed in the notes to consolidated financial statements under Antitrust Proceedings, the Corporation is involved in litigation alleging violations of antitrust laws, the outcome of which cannot presently be determined.

In our opinion, subject to the effects, if any, on the consolidated financial statements of the resolution of the litigation referred to in the preceding paragraph, the statements mentioned above present fairly the consolidated financial position of International Minerals & Chemical Corporation at June 30, 1977 and 1976 and the consolidated results of operations and changes in financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis during the period.

Arthur Young & Company

One IBM Plaza Chicago, Illinois 60611

August 2, 1977, except for
Antitrust Proceedings
in the notes to consolidated
financial statements as to which
the date is August 17, 1977

Officers

Richard A. Lenon
*President and
Chief Executive Officer*

Anthony E. Cascino
*Executive Vice President,
Agriculture*

George D. Kennedy
*Executive Vice President,
Industry and Business Development*

George B. Howell
*Executive Vice President,
Corporate Administration*

Judson H. Drewry
*Senior Vice President,
Agricultural Operations*

Marvin B. Gillis
*Senior Vice President;
President, IMC Chemical
Group, Inc.*

Sidney T. Keel
*Senior Vice President,
Agricultural Marketing*

Julian M. Sobin
*Senior Vice President,
International Business Development*

John R. Taylor
*Senior Vice President, Law;
Secretary*

Robert C. Wheeler
*Senior Vice President,
Corporate Relations*

Harry L. Carroll
*Vice President,
Domestic Agricultural Marketing*

James T. Gibson, Jr.
*Vice President,
Financial Operations and
Real Estate*

Anton F. Kuzdas
*Vice President;
Executive Vice President,
IMC Industry Group*

Donald E. Phillips
*Vice President;
President, IMC Industry Group*

Lester G. Sobin
*Vice President;
Vice President and General
Manager, Industrial and Organic
Chemicals, IMC Chemical
Group, Inc.*

John F. Sonderegger
Vice President and Controller

John M. Stapleton
*Vice President,
Organization and Personnel*

Billie B. Turner
*Vice President,
Florida Operations*

Alan B. Wagner
*Vice President;
Vice President, Administration,
IMC Industry Group*

Darrell L. Feaker
Treasurer

Corporate Staff

Nicolaus Bruns, Jr.
*General Counsel, Operations;
Assistant Secretary*

Richard F. Kotz
*Assistant General Counsel,
Operations;
Assistant Secretary*

Donald G. Brady
Assistant Controller

Lewis B. Landreth
Assistant Controller

Thomas Pescod
Assistant Controller

John E. Galvin
Assistant Treasurer

Paul Faberson
*Public Relations and
Marketing Services*

Jack W. Hicks
Government Affairs

Edward L. Lantz
*Environmental Protection
and Safety*

Thomas J. Regan
Corporate Traffic and Distribution

Neal Schenet
Corporate Social Affairs

Directors

‡Chester Baylis, Jr.
*Director,
Bankers Trust New York
Corporation*

†Edward F. Blettner
*Honorary Director,
The First National Bank of Chicago*

Anthony E. Cascino
Executive Vice President, IMC

John H. Coleman
*President,
J.H.C. Associates Limited,
Toronto;
Financial consulting*

‡*James W. Glanville
*Managing Director,
Lehman Brothers, Incorporated,
New York*

George D. Kennedy
Executive Vice President, IMC

†Richard A. Lenon
*President and Chief Executive
Officer, IMC*

‡*Henry W. Meers
*Vice Chairman,
White, Weld & Co., Incorporated,
Chicago*

†Jeremiah Milbank
*New York;
Personal investments*

*Morton Moskin
*Partner,
Law firm of White & Case,
New York*

‡Hervé M. Pinet
*Executive Vice President,
Banque de Paris et des
Pays-Bas (Paribas)*

†Robert W. Purcell
*Business Consultant to
Rockefeller Family & Associates,
New York*

†Thomas H. Roberts, Jr.
*Chief Executive Officer and
Chairman of the Board,
DeKalb AgResearch, Incorporated,
DeKalb, Illinois;
Hybrid seed producer*

*John T. Ryan, Jr.
*Chairman of the Board,
Mine Safety Appliances Company,
Pittsburgh, Pennsylvania;
Safety equipment manufacturer*

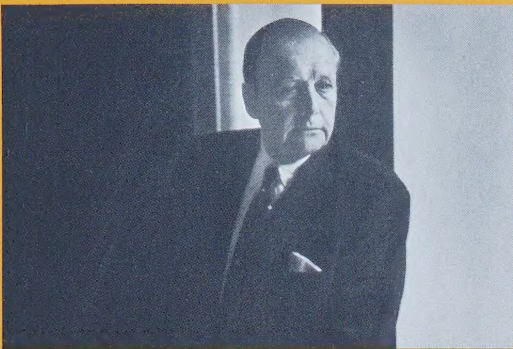
‡Vernon F. Taylor, Jr.
*Denver, Colorado;
Personal investments*

Robert C. Wheeler
Senior Vice President, IMC

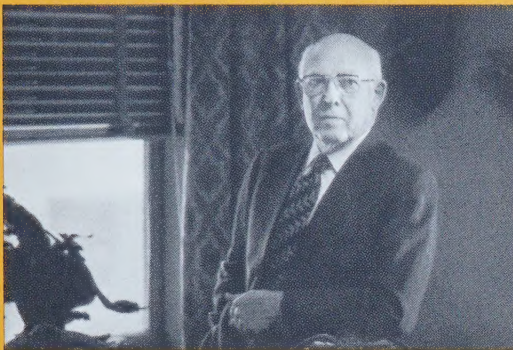
*Board of Directors Audit Committee

†Board of Directors Executive Committee

‡Board of Directors Compensation
and Stock Option Committee



Chester Baylis, Jr.,
Chairman, Compensation and Stock Option
Committee, Board of Directors



Robert W. Purcell,
Chairman, Executive Committee,
Board of Directors



John T. Ryan, Jr.,
Chairman, Audit Committee,
Board of Directors

Principal Offices

Corporate Headquarters

IMC Plaza
Libertyville, Illinois 60048
(312-362-8100)

IMC General Office

421 East Hawley Street
Mundelein, Illinois 60060
(312-566-2600)

Midwest Headquarters

666 Garland Place
Des Plaines, Illinois 60016
(312-296-0600)

Eastern Headquarters

245 Park Avenue
New York, New York 10017
(212-661-4300)

Corporate Data

Independent Public Accountants

Arthur Young & Company
Chicago, Illinois 60611

Stock Exchanges

New York Stock Exchange
Midwest Stock Exchange
Pacific Stock Exchange
Paris Stock Exchange
U.S. Ticker Symbol: IGL

Transfer Agents

The First National Bank of Chicago
One First National Plaza
Chicago, Illinois 60670

Bank of America National Trust &
Savings Association
Box 37000
San Francisco, California 94137

Registrars

The First National Bank of Chicago
One First National Plaza
Chicago, Illinois 60670

Bank of America National Trust &
Savings Association
Box 37000
San Francisco, California 94137

Trustees

*(Subordinated Convertible
Debentures)*

The First National Bank of Chicago
One First National Plaza
Chicago, Illinois 60670

(9.35 Percent Debentures)

Morgan Guaranty Trust Company
of New York
23 Wall Street
New York, New York 10015

Paying Agent

*(Subordinated Convertible and
9.35 Percent Debentures)*

The First National Bank of Chicago
One First National Plaza
Chicago, Illinois 60670

Principal Subsidiaries

International Minerals & Chemical
Corporation (Canada) Limited
55 Yonge Street, Suite 400
Toronto, Ontario, Canada M5E 1J4
(416-868-1446)

IMC Chemical Group, Inc.
666 Garland Place
Des Plaines, Illinois 60016
(312-296-0600)

IMC Development Corporation
201 Christina Boulevard
Lakeland, Florida 33802
(813-646-5061)

IMC Exploration Company
3450 One Allen Center
Houston, Texas 77002
(713-658-1856)

IMC Industry Group, Inc.
(including Continental Ore
operations)
245 Park Avenue
New York, New York 10017
(212-661-4300)

International Sulphur Co., Limited
2523 Norcen Tower
715 Fifth Avenue, S.W.
Calgary, Alberta, Canada T2P 0N2
(403-263-2910)

New Wales Chemicals, Inc.
(formerly IMC Chemicals Corp.)
Post Office Box 1035
Mulberry, Florida 33860
(813-428-2531)



ECONOMICS OF NITROGEN

Nitrogen is commonly procured by separating it from air in plants specifically designed and built for this process. Liquid nitrogen has a nominal value of \$20 per ton. Our proven and probable reserves are well in excess of the equivalent of two million tons of liquid nitrogen.

Nitrogen is predominantly used in the fertilizer industry and in fracturing and testing oil and gas wells. However, I believe its greatest future in Western Canada will probably lie in the area of food processing and refrigeration, replacing ice and outmoded refrigeration systems.

Time is on the side of your company. The future has never appeared brighter, and we can look forward to its rewards in two short years.

paper

Annual Meeting Review

THE INTERNATIONAL HELIUM
COMPANY LIMITED

The following is a summary of comments made by Louis Erlich, president, The International Helium Company Limited, at the annual meeting held in Toronto on October 30, 1965.

Your company has just taken a significant step towards the extraction and orderly marketing of our reserves of helium and nitrogen, which we anticipate will be in effect approximately two years from today.

We have engaged the Stanford Research Institute of Menlo Park, California, to undertake a worldwide study of helium markets and a regional study of nitrogen markets.

The results of this study, expected to be completed in approximately three months, will enable us to make firm decisions concerning the design and size of an extraction plant and also help determine the proportion of liquefaction facilities required.

Detail engineering and design of the plant, which will require approximately six months, will likely commence immediately after the marketing study has been appraised. Actual construction of the plant will take from 12 to 15 months.

Your company has already been approached by large organizations seeking exclusive distribution rights for our helium in foreign markets. It is likely that we will appoint exclusive distributors for some world markets while actively participating in distribution to others.

The majority of these arrangements will be completed before the plant is ready for production. It is therefore quite likely that your company will be actively marketing its helium and nitrogen, which is a by-product of the helium extraction process, two years from today.

PROVEN AND PROBABLE RESERVES

International Helium has proven and probable reserves of approximately three quarters of a billion cubic feet of helium and more than 60 billion cubic feet of nitrogen.

These reserve estimates cover only some 2,300 acres surrounding our two wells in the Wood Mountain area of southwestern Saskatchewan. However, we hold leases totalling 67,000 acres in this area, in which several promising structures exist, and where further exploration will be undertaken with a view to augmenting our reserves.

Present helium prices on world markets range from a minimum of \$35 per thousand cubic feet in the U.S. (f.o.b. plant) to between \$200 and \$300 per thousand cubic feet, depending upon quantity and location. There are no known economic reserves of helium outside of North America.

The U.S. currently uses approximately one billion cubic feet of helium per year. With one exception, all helium in the U.S. is procured through extraction from natural gas by means of government-sponsored extraction plants which straddle and tap pipelines. The government actually purchases all helium so produced and resells it to users.

The exception is the Kerr-McGee plant at Pinta Dome, Arizona, in which your company's controlled subsidiary has a 25% net profits interest. The helium here occurs in a form similar to that in our Canadian holdings.

Since helium has been designated as a critical material in the U.S., it is being stockpiled by the government. However, the rate of growth of helium usage has been little short of phenomenal in recent years. Surveys indicate that the government will have to dip into its stored reserves within the next few years to accommodate a demand which will increasingly outpace production each year thereafter.